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<210> 5826

<211> 88

<212> PRT

<213> Homo sapiens

<400> 5826

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			20					25				30			
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Lys	Cys	Leu	Cys	Phe	Ala	Tyr	Cys	Val	Trp	Met	Cys	Val	Cys	Val	Cys
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<210> 5827

<211> 428

<212> DNA

<213> Homo sapiens

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<210> 5824

<211> 213

<212> PRT

<213> Homo sapiens

<400> 5824

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Lys	Met	Ala	Gly	Ala	Met	Ser	Thr	Thr	Ala	Lys	Thr	Met	Gln	Ala	Val
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			165					170						175	
Lys	Met	Ala	Lys	Ala	Pro	Ser	Ala	Ala	Arg	Ser	Leu	Pro	Ser	Ala	Ser
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<210> 5825

<211> 1940

<212> DNA

<213> Homo sapiens

<400> 5825

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625	630	635
Pro Leu Ile Asp Phe Cys Asp Thr Pro Glu Ala His Val Ala Val Gly		640
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Ser Glu Ser Arg Pro Leu Ile Asp Leu Met Thr Asn Thr Pro Asp Met		655
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Asn Lys Asn Val Ala Lys Pro Ser Pro Val Val Gly Gln Leu Ile Asp		670
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&lt;210&gt; 5823

&lt;211&gt; 2585

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5823

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4986

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&lt;210&gt; 5822

&lt;211&gt; 712

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5822

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			20					25					30		
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	35					40						45			
Pro	Glu	Gln	Pro	Pro	Leu	Pro	Thr	Ser	Glu	Ser	Pro	Phe	Ala	Trp	Ser
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&lt;210&gt; 5821

&lt;211&gt; 3292

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5821

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660

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 1652

&lt;210&gt; 5820

&lt;211&gt; 274

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5820

Met	Ala	Leu	Leu	Arg	Lys	Ile	Asn	Gln	Val	Leu	Leu	Phe	Leu	Leu	Ile
1				5					10					15	
Val	Thr	Leu	Cys	Val	Ile	Leu	Tyr	Lys	Lys	Val	His	Lys	Gly	Thr	Val
			20					25					30		
Pro	Lys	Asn	Asp	Ala	Asp	Asp	Glu	Ser	Glu	Thr	Pro	Glu	Glu	Leu	Glu
		35					40					45			
Glu	Glu	Ile	Pro	Val	Val	Ile	Cys	Ala	Ala	Ala	Gly	Arg	Met	Gly	Ala
	50					55					60				
Thr	Met	Ala	Ala	Ile	Asn	Ser	Ile	Tyr	Ser	Asn	Pro	Asp	Ala	Asn	Ile
65					70					75				80	
Leu	Phe	Tyr	Val	Val	Gly	Leu	Arg	Asn	Thr	Leu	Thr	Arg	Ile	Arg	Lys

&lt;213&gt; Homo sapiens

&lt;400&gt; 5818

Met Gly Gln Leu Gln Asn Lys Glu Asn Asn Asn Thr Lys Asp Ser Pro  
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 Ser Arg Gln Cys Ser Trp Asp Lys Ser Glu Ser Pro Gln Arg Ser Ser  
 20 25 30  
 Met Asn Asn Gly Ser Pro Thr Ala Leu Ser Gly Ser Lys Thr Asn Ser  
 35 40 45  
 Pro Lys Asn Ser Val His Lys Leu Asp Val Ser Arg Ser Pro Pro Leu  
 50 55 60  
 Met Val Lys Lys Asn Pro Ala Phe Asn Lys Gly Ser Gly Ile Val Thr  
 65 70 75 80  
 Asn Gly Ser Phe Ser Ser Ser Asn Ala Glu Gly Leu Glu Lys Thr Gln  
 85 90 95  
 Thr Thr Pro Asn Gly Ser Leu Gln Ala Arg Arg Ser Ser Ser Leu Lys  
 100 105 110  
 Val Ser Gly Thr Lys Met Gly Thr His Ser Val Gln Asn Gly Thr Val  
 115 120 125  
 Arg Met Gly Ile Leu Asn Ser Asp Thr Leu Gly Asn Pro Thr Asn Val  
 130 135 140  
 Arg Asn Met Ser Trp Leu Pro Asn Gly Tyr Val Thr Leu Arg Asp Asn  
 145 150 155 160  
 Lys Gln Lys Glu Gln Ala Gly Glu Leu Gly Gln His Asn Arg Leu Ser  
 165 170 175  
 Pro Met Ile Met Ser Ile Thr Val Leu His Asp Glu Leu Asp Asp  
 180 185 190

&lt;210&gt; 5819

&lt;211&gt; 1652

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5819

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 180  
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 240  
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 300  
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 360  
 aaaattaatc aggtgctgct gttccttctg atcgtgaccc tctgtgtgat tctgtataag  
 420  
 aaagttcata aggggactgt gcccaagaat gacgcagatg atgaatccga gactcctgaa  
 480  
 gaactggaag aagagattcc tgtggtgatt tgtgctgcag caggaggat ggggtgccact  
 540  
 atggctgcca tcaatagcat ctacagcaac cctgacgcca acatcttggt ctatgtagtg  
 600

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      35              40              45
Thr Arg Tyr His Val Leu Val Asn Leu Gly Leu Pro Ser Leu Phe Ser
      50              55              60
Phe Gly Leu Val Asp Asp Ala His His Leu Ile Asn Ala Leu Arg Gln
      65              70              75              80
Gln Ser Ile Thr Leu His Leu Val Asp Val Met Pro Val Leu Ile Thr
      85              90              95
Leu Ser Ser Leu Gly Ser Ser Phe Leu Leu His Leu Arg Phe Gly Pro
      100              105              110
Leu Ser Leu Val Ser His Thr Gly Ala Leu Gln Leu Pro Asn Lys Gly
      115              120              125
Gln His Leu Ser Cys Gly Phe Ile Pro Ala Gly Pro Val Asn Glu Arg
      130              135              140
Thr Val Ser Leu Glu His Lys Ile Arg Val Arg Leu Val Leu Val Leu
      145              150              155              160
Gln Thr Thr Gly Gly Tyr Ile Arg His Gly Arg Gly Cys Ser Glu Ala
      165              170              175
Ser Asp His His Ala Ser Ile Pro Gln Ala Ala Asn Gly Arg Arg Ser
      180              185              190
Leu Leu Leu Ala
      195

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&lt;210&gt; 5817

&lt;211&gt; 648

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5817

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120
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tcacctatga taatgtccat cacagttctc catgatgaac ttgatgac
648

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&lt;210&gt; 5818

&lt;211&gt; 191

&lt;212&gt; PRT

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 Gln Thr Arg Ala Ile Tyr Asp Ile Tyr Gly Lys Arg Gly Leu Glu Met  
 50 55 60  
 Glu Gly Trp Glu Val Val Glu Arg Arg Arg Thr Pro Ala Glu Ile Arg  
 65 70 75 80  
 Glu Glu Phe Glu Arg Leu Gln Arg Glu Arg Glu Arg Arg Leu Gln  
 85 90 95  
 Gln Arg Thr Asn Pro Lys Leu Cys Asp Asn Lys Leu Cys Ser Ala Val  
 100 105 110  
 Phe Ile Pro Trp Asn Pro Thr Arg Pro Asp His Cys Pro Ser Ser Glu  
 115 120 125  
 Pro Arg Gln Glu His Arg Gly Leu Pro Ala Val Ala Met Gly Tyr Pro  
 130 135 140  
 Val Ser His Glu His  
 145

&lt;210&gt; 5815

&lt;211&gt; 590

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5815

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 120  
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 240  
 cagagtataa cccttcatct tgttgatgtc atgccggtcc tcatcacgct ttcttcgctt  
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 ggctcttctt tctctctgca tctgcggttt ggtccgttga gccttgcttc ccatacgggt  
 360  
 gccctccagc ttcccaacaa gggacagcac ctctcctgtg gggttcatccc ggcggtccg  
 420  
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 480  
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 590

&lt;210&gt; 5816

&lt;211&gt; 196

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5816

Phe Ile Gln Ala Ala Leu Gly Asp Gln Pro Arg Asp Ile Leu Cys Gly  
 1 5 10 15  
 Ala Ala Asp Glu Val Leu Ala Val Leu Lys Asn Glu Lys Leu Arg Asp  
 20 25 30  
 Lys Glu Arg Arg Lys Glu Ile Asp Leu Leu Leu Gly Gln Thr Asp Asp

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 gccgccctgt agttcttggc tgggtctgga ggtgtctgtg gagcaccctg ccctcaccac  
 1860  
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 1920  
 aggcctcccg gtcaggagac ctctgctgtg ctggcttccc atgaccacct cctcttgctg  
 1980  
 aaatattact gcttgaatct ggagcagatt gcgggtttat aaaactgctt tttatctgag  
 2040  
 aacaaacggg tttggaaatt agtcgtcttt tttccccact ccagagctg ctcaagtcac  
 2100  
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 2160  
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 2991

&lt;210&gt; 5814

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5814

Ala Ser Ser Glu Glu Leu Lys Ala Ala Tyr Arg Arg Leu Cys Met Leu

1

5

10

15

Tyr His Pro Asp Lys His Arg Asp Pro Glu Leu Lys Ser Gln Ala Glu

20

25

30

Arg Leu Phe Asn Leu Val His Gln Ala Tyr Glu Val Leu Ser Asp Pro

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1680  
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1740

115	120	125
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130	135	140
Ala Arg Arg Arg Ala Leu Lys Arg Phe Val Asn Leu Val Ala Arg His		
145	150	155
Pro Leu Phe Ser Glu Asp Val Val Leu Lys Leu Phe Leu Ser Phe Ser		
165	170	175
Gly Ser Asp Val Gln Asn Lys Leu Lys Glu Ser Ala Gln Cys Val Gly		
180	185	190
Asp Glu Phe Leu Asn Cys Lys Leu Ala Thr Arg Ala Lys Asp Phe Leu		
195	200	205
Pro Ala Asp Ile Gln Ala Gln Phe Ala Ile Ser Arg Glu Leu Ile Arg		
210	215	220
Asn Ile Tyr Asn Ser Phe His Lys Leu Arg Asp Arg Ala Glu Arg Ile		
225	230	235
Ala Ser Arg Ala Ile Asp Asn Ala Ala Asp Leu Leu Ile Phe Gly Lys		
245	250	255
Glu Leu Ser Ala Ile Gly Ser Asp Thr Thr Pro Leu Pro Ser Trp Ala		
260	265	270
Ala Leu Asn Ser Ser Thr Trp Gly Ser Leu Lys Gln Ala Leu Lys Gly		
275	280	285
Leu Ser Val Glu Phe Ala Leu Leu Ala Asp Lys Ala Ala Gln Gln Gly		
290	295	300
Lys Gln Glu Glu Asn Asp Val Val Glu Lys Leu Asn Leu Phe Leu Asp		
305	310	315
Leu Leu Gln Ser Tyr Lys Asp Leu Cys Glu Arg His Glu Lys Gly Val		
325	330	335
Leu His Lys His Gln Arg Ala Leu His Lys Tyr Ser Leu Met Lys Arg		
340	345	350
Gln Met Met Ser Ala Thr Ala Gln Asn Arg Glu Pro Glu Ser Val Glu		
355	360	365
Gln Leu Glu Ser Arg Ile Val Glu Gln Glu Asn Ala Ile Gln Thr Met		
370	375	380
Glu Leu Arg Asn Tyr Phe Ser Leu Tyr Cys Leu His Gln Glu Thr Gln		
385	390	395
Leu Ile His Val Tyr Leu Pro Leu Thr Ser His Ile Leu Arg Ala Phe		
405	410	415
Val Asn Ser Gln Ile Gln Gly His Lys Glu Met Ser Lys Val Trp Asn		
420	425	430
Asp Leu Arg Pro Lys Leu Ser Cys Leu Phe Ala Gly Pro His Ser Thr		
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Leu Thr Pro Pro Cys Ser Pro Glu Asp Gly Leu Cys Pro His		
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&lt;210&gt; 5813

&lt;211&gt; 2991

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5813

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<210> 5812
<211> 463
<212> PRT
<213> Homo sapiens
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<400> 5812
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      20          25          30
Thr Pro Gln Ala Ile Glu Pro Gln Ala Ile Val Gln Gln Val Pro Ala
      35          40          45
Pro Ser Arg Met Gln Met Pro Gln Gly Asn Pro Leu Leu Leu Ser His
      50          55          60
Thr Leu Gln Glu Leu Leu Ala Arg Asp Thr Val Gln Val Glu Leu Ile
65          70          75          80
Pro Glu Lys Lys Gly Leu Phe Leu Lys His Val Glu Tyr Glu Val Ser
      85          90          95
Ser Gln Arg Phe Lys Ser Ser Val Tyr Arg Arg Tyr Asn Asp Phe Val
      100          105          110
Val Phe Gln Glu Met Leu Leu His Lys Phe Pro Tyr Arg Met Val Pro

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 1860  
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 1920  
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 2009

<210> 5810

<211> 52

<212> PRT

<213> Homo sapiens

<400> 5810

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Gly	Gly	Gln	Trp	Arg	Asp	Leu	Gly	Ser	Leu	Gln	Pro	Pro	Pro	Pro	Gly
		20					25				30				
Phe	Lys	Gln	Phe	Ser	Cys	Leu	Ser	Leu	Leu	Ser	Ser	Trp	His	Tyr	Lys
		35				40						45			
His	Pro	Thr	Pro												
		50													

<210> 5811

<211> 1607

<212> DNA

<213> Homo sapiens

<400> 5811

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 agagaccggg ggtgatggtg gtgctggctg gacgtgggtg gtttcacagg acctgctgtg  
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 360  
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 660

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<211> 261

<212> PRT

<213> Homo sapiens

<400> 5808

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Trp Leu Ala Ala Leu Gln Asp Arg Ser Ile Leu Ala Pro Leu Ala Trp  
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His Leu Arg His Pro Val Cys Val Glu Leu Leu Thr Val Leu Trp Val  
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Val Pro Thr Leu Gly Thr Asp Arg Leu Leu Leu Ala Phe Leu Leu Thr  
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<212> DNA

<213> Homo sapiens

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&lt;212&gt; DNA

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&lt;400&gt; 5807

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&lt;210&gt; 5806

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5806

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Leu	Ser	Pro	Arg	Lys	Asp	Gly	Leu	Ser	Tyr	Gln	Ile	Phe	Pro	Asp	Pro
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Ser	Asp	Phe	Asp	Arg	Cys	Cys	Lys	Leu	Lys	Asp	Arg	Leu	Pro	Ser	Ile
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Val	Val	Glu	Pro	Thr	Glu	Gly	Glu	Val	Glu	Ser	Gly	Glu	Leu	Arg	Trp
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Pro	Pro	Glu	Glu	Phe	Leu	Val	Gln	Glu	Asp	Glu	Gln	Asp	Asn	Cys	Glu
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Glu	Thr	Ala	Lys	Glu	Asn	Lys	Glu	Gln							

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&lt;210&gt; 5804

&lt;211&gt; 126

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5804

Met	Ala	Pro	Gly	Glu	Val	Thr	Ile	Thr	Val	Arg	Leu	Ile	Arg	Ser	Phe
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Gln	Thr	Val	Lys	Glu	Phe	Ile	Val	Phe	Leu	Lys	Gln	Asp	Val	Pro	Leu
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Arg	Thr	Asn	Leu	Pro	Pro	Pro	Phe	Arg	Asn	Tyr	Lys	Tyr	Asp	Ala	Leu
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Lys	Ile	Ile	His	Gln	Ala	His	Lys	Ser	Lys	Thr	Asn	Glu	Leu	Val	Leu
65				70					75					80	
Ser	Leu	Glu	Asp	Asp	Glu	Arg	Leu	Leu	Leu	Lys	Glu	Asp	Ser	Thr	Leu
			85						90				95		
Lys	Ala	Ala	Gly	Ile	Ala	Ser	Glu	Thr	Glu	Ile	Ala	Phe	Phe	Cys	Glu
			100					105					110		
Glu	Asp	Tyr	Arg	Asn	Tyr	Lys	Ala	Asn	Pro	Ile	Ser	Ser	Trp		
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&lt;210&gt; 5805

&lt;211&gt; 1112

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5805

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Pro Arg Glu Asn Pro Asp Leu Ala Cys Leu Gln Ser Ile Ile Phe Asp
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Glu Glu Arg Ser Pro Glu Glu Gln Ala Lys Thr Tyr Lys Asp Glu Gly
      65           70           75           80
Asn Asp Tyr Phe Lys Glu Lys Asp Tyr Lys Lys Ala Val Ile Ser Tyr
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Thr Glu Gly Leu Lys Lys Lys Cys Ala Asp Pro Asp Leu Asn Ala Val
      100          105          110
Leu Tyr Thr Asn Arg Ala Ala Ala Gln Tyr Tyr Leu Gly Asn Phe Arg
      115          120          125
Ser Ala Leu Asn Asp Val Thr Ala Ala Arg Lys Leu Lys Pro Cys His
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Leu Lys Ala Ile Ile Arg Gly Ala Leu Cys His Leu Glu Leu Lys His
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Phe Ala Glu Ala Val Asn Trp Cys Asp Glu Gly Leu Gln Ile Asp Ala
      165          170          175
Lys Glu Lys Lys Leu Leu Glu Met Arg Ala Lys Ala Asp Lys Leu Lys
      180          185          190
Arg Ile Glu Gln Arg Asp Val Arg Lys Ala Asn Leu Lys Glu Lys Lys
      195          200          205
Glu Arg Asn Gln Asn Glu Ala Leu Leu Gln Ala Ile Lys Ala Arg Asn
      210          215          220
Ile Arg Leu Ser Glu Ala Ala Cys Glu Asp Glu Asp Ser Ala Ser Glu
      225          230          235          240
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      245          250          255
Gly Ala Arg Leu Ser Leu Asp Gly Gln Gly Arg Leu Ser Trp Pro Val
      260          265          270
Leu Phe Leu Tyr Pro Glu Tyr Ala Gln Ser Asp Phe Ile Ser Ala Phe
      275          280          285
His Glu Asp Ser Arg Phe Ile Asp His Leu Met Val Met Phe Gly Glu
      290          295          300
Thr Pro Ser Trp Asp Leu Glu Gln Lys Tyr Cys Leu Ile Ile Trp Arg
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Ser Thr Leu Arg Met Arg Thr Gly Gln Asn Tyr Thr Gly Cys Leu Pro
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&lt;210&gt; 5803

&lt;211&gt; 692

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5803

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&lt;210&gt; 5802

&lt;211&gt; 350

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5802

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      485              490              495
Glu Val Glu Arg Gly Ser Gly Thr Glu Glu Ala Asn Glu Asp Met Glu
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	50	55	60		
Val Leu	Glu Asn Ala Gly Ser Val	Gly Leu Ala Leu Ile	Val Trp Ile		
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Val Thr	Gly Phe Ile Thr Val Val	Gly Ala Leu Cys Tyr	Ala Glu Leu		
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Gly Val	Thr Ile Pro Lys Ser Gly	Gly Asp Tyr Ser Tyr	Val Lys Asp		
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Ile Phe	Gly Gly Leu Ala Gly Phe	Leu Arg Leu Trp Ile	Ala Val Leu		
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	165	170	175		
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Gly Lys	Leu Leu Ala Leu Ala Leu	Ile Ile Ile Met Gly	Ile Val Gln		
	195	200	205		
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Glu Leu	Val Asp Pro Tyr Lys Asn	Leu Pro Arg Ala Ile	Phe Ile Ser		
	260	265	270		
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	290	295	300		
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Pro Arg	Pro Ile Lys Ile Asn Leu	Leu Phe Pro Ile Ile	Tyr Leu Leu		
	420	425	430		
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	435	440	445		
Cys Gly	Ile Gly Leu Ala Ile Met	Leu Thr Gly Val Pro	Val Tyr Phe		

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&lt;210&gt; 5800

&lt;211&gt; 535

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5800

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&lt;210&gt; 5799

&lt;211&gt; 4261

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5799

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1380

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      115      120      125
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Pro Leu Pro Pro Lys Gly Arg Val Leu Ile His Trp Met Thr Leu Cys
145      150      155      160
Gln Thr Gln Met Lys Leu Met Ala Ile Pro Leu Val Phe Gln Ile Met
      165      170      175
Phe Gly Ile Leu Asn Gly Leu Tyr His Tyr Ala Val Phe Glu Glu Thr
      180      185      190
Leu Glu Lys Thr Ile His Glu Glu
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&lt;210&gt; 5797

&lt;211&gt; 405

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5797

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405

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&lt;210&gt; 5798

&lt;211&gt; 109

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5798

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20      25      30
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35      40      45
Ser Gln Arg Asn Tyr Arg Ser Leu Ser Leu Tyr Cys Trp Leu Ala Arg
50      55      60
Glu Gly Arg Thr Ser Ser Tyr Gln Gly Asn Gln Gly Ser Leu Arg Pro
65      70      75      80
Arg Pro Glu Pro Arg Gly Pro Glu Gly Ser Lys Arg Ser Gly Arg Pro
85      90      95
Val Pro Cys Gly Asn Pro Ser Leu Met Thr Asn Leu Gly

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&lt;210&gt; 5796

&lt;211&gt; 200

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5796

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Tyr	Leu	Arg	Lys	Glu	Met	Thr	Gln	Asn	Ile	Tyr	Gln	Met	Ala	Thr	Phe
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65				70				75					80		
Ala	Thr	Leu	Pro	Phe	Leu	Ser	Thr	Val	Val	Thr	Asp	Lys	Leu	Phe	Val
			85				90					95			
Ile	Asp	Ala	Leu	Tyr	Ser	Asp	Asn	Ile	Ser	Lys	Glu	Asn	Cys	Val	Phe

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<210> 5794

<211> 209

<212> PRT

<213> Homo sapiens

<400> 5794

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Lys	Val	Tyr	Asp	Ser	Leu	Leu	Ala	Leu	Pro	Gln	Asp	Leu	Gln	Ala	Ala
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Arg	Ala	Leu	Val	Ile	Ile	Ser	Ile	Ile	Val	Ala	Ala	Leu	Gly	Val	Leu
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Leu	Ser	Val	Val	Gly	Gly	Lys	Cys	Thr	Asn	Cys	Leu	Glu	Asp	Glu	Ser
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Ala	Lys	Ala	Lys	Thr	Met	Ile	Val	Ala	Gly	Val	Val	Phe	Leu	Leu	Ala
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Gln	Asp	Phe	Tyr	Asn	Pro	Leu	Val	Ala	Ser	Gly	Gln	Lys	Arg	Glu	Met
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Gly	Ala	Ser	Leu	Tyr	Val	Gly	Trp	Ala	Ala	Ser	Gly	Leu	Leu	Leu	Leu
			165					170						175	
Gly	Gly	Gly	Leu	Leu	Cys	Cys	Asn	Cys	Pro	Pro	Arg	Thr	Asp	Lys	Pro
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<210> 5795

<211> 993

<212> DNA

<213> Homo sapiens

<400> 5795

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 Arg Tyr Phe Asp Glu Glu Phe Thr Ala Gln Thr Ile Thr Ile Thr Pro  
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&lt;210&gt; 5793

&lt;211&gt; 2767

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5793

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<211> 479

<212> PRT

<213> Homo sapiens

<400> 5792

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Gly	Ser	Phe	Ile	Gly	Tyr	Lys	Glu	Lys	Pro	Gln	Asp	Val	Asp	Leu	Pro
		35					40					45			
Tyr	Pro	Leu	Asn	Asn	Phe	Ser	Val	Ala	Lys	Cys	Gln	Leu	Met	Lys	Thr
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Thr	Val	Ile	Glu	Arg	Thr	Phe	His	Val	Asp	Thr	Pro	Glu	Glu	Arg	Glu
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Glu	Trp	Thr	Glu	Ala	Ile	Gln	Ala	Val	Ala	Asp	Arg	Leu	Gln	Arg	Gln
			100					105					110		
Glu	Glu	Glu	Arg	Met	Asn	Cys	Ser	Pro	Thr	Ser	Gln	Ile	Asp	Asn	Ile
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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5791

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&lt;400&gt; 5790

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&lt;210&gt; 5791

&lt;211&gt; 3285

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<212> DNA  
<213> Homo sapiens

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<210> 5790  
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Glu Ile Phe Arg Gln Arg Phe Arg His Leu Arg Tyr Gln Glu Thr Pro			
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Gly Pro Arg Glu Ala Leu Ser Gln Leu Arg Val Leu Cys Cys Glu Trp			
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Leu Arg Pro Glu Lys His Thr Lys Glu Gln Ile Leu Glu Phe Leu Val			
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His Gly Pro Ala Gln Glu Glu Pro Trp Glu Lys Lys Glu Ser Leu Gly			
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Pro Phe Pro Lys Ser Glu Gln Val Tyr Leu His Phe Leu Ser Val Val			
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Thr Glu Asp Gly Pro Glu Pro Lys Asp Lys Gly Ser Leu Pro Gln Pro			
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Pro Ile Thr Glu Val Glu Ser Gln Val Phe Ser Glu Lys Leu Ala Thr			
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Asp Thr Ser Thr Phe Glu Ala Thr Ser Glu Gly Thr Leu Glu Leu Gln			
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Gln Arg Asn Pro Lys Ala Glu Arg Leu Arg Trp Ser Pro Ala Gln Glu			
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Glu Ser Phe Arg Gln Met Val Val Ile His Lys Glu Ile Pro Thr Gly			
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Lys Lys Asp His Glu Cys Ser Glu Cys Gly Lys Thr Phe Ile Tyr Asn			
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Ser His Leu Val Val His Gln Arg Val His Ser Gly Glu Lys Pro Tyr			
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Lys Cys Ser Asp Cys Gly Lys Thr Phe Lys Gln Ser Ser Asn Leu Gly			
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Gln His Gln Arg Ile His Thr Gly Glu Lys Pro Phe Glu Cys Asn Glu			
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Cys Gly Lys Ala Phe Arg Trp Gly Ala His Leu Val Gln His Gln Arg			
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Ile His Ser Gly Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ala			
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Phe Ser Gln Ser Ser Tyr Leu Ser Gln His Arg Arg Ile His Ser Gly			
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Glu Lys Pro Phe Ile Cys Lys Glu Cys Gly Lys Ala Tyr Gly Trp Cys			
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Ser Glu Leu Ile Arg His Arg Arg Val His Ala Arg Lys Glu Pro Ser			
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His			

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&lt;210&gt; 5788

&lt;211&gt; 417

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5788

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<210> 5786

<211> 159

<212> PRT

<213> Homo sapiens

<400> 5786

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<212> DNA

<213> Homo sapiens

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Tyr His Met Gln Leu Ala Lys Gln Leu Ala Gly Ile Leu Gln Val Pro					
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Leu Glu Glu Arg Gly Gly Ile Met Ser Leu Thr Glu Val Tyr Cys Leu					
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Val Asn Arg Ala Arg Gly Met Glu Leu Leu Ser Pro Glu Asp Leu Val					
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Gln Ser					
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&lt;210&gt; 5785

&lt;211&gt; 785

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5785

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&lt;210&gt; 5784

&lt;211&gt; 386

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5784

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	65				70					75				80	
Lys	Ile	Val	Val	His	Leu	His	Pro	Ala	Pro	Pro	Asn	Lys	Glu	Pro	Gly
			85						90				95		
Pro	Phe	Gln	Ser	Ser	Lys	Asn	Ser	Tyr	Ile	Lys	Leu	Ser	Phe	Lys	Glu
		100						105					110		
His	Gly	Gln	Ile	Glu	Phe	Tyr	Arg	Arg	Leu	Ser	Glu	Glu	Met	Thr	Gln
		115					120					125			
Arg	Arg	Trp	Glu	Asn	Met	Pro	Val	Ser	Gln	Ser	Leu	Gln	Thr	Asn	Arg
		130					135				140				
Gly	Pro	Gln	Pro	Gly	Arg	Ile	Arg	Ala	Val	Gly	Ile	Val	Gly	Ile	Glu
	145				150					155				160	
Arg	Lys	Leu	Glu	Glu	Lys	Arg	Lys	Glu	Thr	Asp	Lys	Asn	Ile	Ser	Glu
			165					170					175		
Ala	Phe	Glu	Asp	Leu	Ser	Lys	Leu	Met	Ile	Lys	Ala	Lys	Glu	Met	Val

	85		90		95										
Gly	Gln	Ala	Pro	Ala	Pro	Pro	Ala	Pro	Gly	Gln	Ala	Gly	Ser	His	Arg
	100				105					110					
Pro	Gly	Ala	Ala	Pro	Ser	Pro	Arg	Cys	Ser	Ser	Gly	Asn	His	Arg	Ser
	115					120					125				
Ser	Leu	Ala	Val	Ala	Trp	Arg	His	Gly	Thr	Trp	Ile	Gly	Gln	Pro	Pro
	130					135					140				
Pro	Cys	Pro													
145															

&lt;210&gt; 5783

&lt;211&gt; 1839

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5783

gtgggagcgg ccattggaccg cttcgtttgg accagcggcc tcctggagat caacgagacc  
 60  
 ctggtgatcc agcagcgcgg ggtgcgaatc tacgatggcg aggagaagat aaaatttgat  
 120  
 gctgggactc tccttcttag tacacaccga ctgatttggg gagatcagaa aaatcatgag  
 180  
 tgttgcattg ccattctcct ttcccaatt gtgttcattg aagaacaggc ggctggaatt  
 240  
 gggaagagt ccaaaatagt ggttcattct caccagctc ctccatacaa agaactggc  
 300  
 ccattccaga gtagtaagaa ctctacatc aaactctcct tcaaagaaca tggccagatt  
 360  
 gagttttaca ggcgtttatc agaggaaatg acacaaagaa gatgggagaa tatgccagtt  
 420  
 tccagtcac tacaacaaa tagaggacc cagccaggaa gaataagggc ttaggaatt  
 480  
 gtaggtattg aaaggaaact ggaagaaaaa agaaaagaaa ctgacaaaaa ctttctgag  
 540  
 gcctttgaag acctcagcaa actaatgatc aaggctaagg aaatgggtga attatcaaaa  
 600  
 tcaattgcta ataaaattaa agacaaacaa ggtgacatca cagaagatga gaccatcagg  
 660  
 tttaaatcct acttgctgag catgggaata gctaaccag ttaccagaga aacctacggc  
 720  
 tcaggcacac agtaccacat gcagctggcc aaacaactgg ctggaatatt gcagggtgct  
 780  
 ttagaggaac gagggggaat aatgtcactc acggaggtgt actgcttagt aaaccgagct  
 840  
 cgaggaatgg aattgctctc accagaagat ttagtgaatg cgtgcaagat gctggaagca  
 900  
 ctgaaattac ctctcaggct ccgtgtgttt gacagtggcg tcatggtaat tgagcttcag  
 960  
 tctcacaagg aagaggaaat ggtggcctcg gccctggaga cagtttcaga aaagggatcc  
 1020  
 ctaacatcag aagagtttgc taagcttggt ggaatgtctg tcctcctagc caaagaaagg  
 1080  
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 1140

<210> 5781  
 <211> 845  
 <212> DNA  
 <213> Homo sapiens

<400> 5781  
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 60  
 ggcgctggcg tgcggtgtca tttctgcggt gtaaagtctc ccaccttggc cgatttcaag  
 120  
 ccaccaggtg aggatggcac tgcaacatct tccactgagg ctccagctgc cctctcaggt  
 180  
 acatcagggc ctggancgtc ctctcctcca ggagggccag gactcgcccc cctgccagcc  
 240  
 cccgaagcat tgcagccagg agtgcagcgt gggggccctg caggccatgg ccaggcccca  
 300  
 gcgccaccag caccaggtca ggctggaagc cataggccag gggcagcacc aagcccaaga  
 360  
 tgcagctcag gaaaccaccg gtcactctg gcagtggcgt ggagacatgg aacatggata  
 420  
 gggcagccgc ctcttgccc ctgatgttca gccacagact cctcccgtca tgggcgaggt  
 480  
 ctggaggccg gtccagctgt cccagggccca cgcacagcag cctggaagaa gagctggcct  
 540  
 caggacaggt gttcatgttg tccagagtcc attcccagaa ctctctgtgc ttggccagcc  
 600  
 aggatagggg tgcccacagg tcttgccgtc agaggctcag gatggccaag tgaggcttac  
 660  
 ctctgggctc cgtgggacag gcctctccga acagccacat ccagggtggc tgctgcagca  
 720  
 gaggtctggag tggctgttat accactgttc acctgtggga tgaataaaca gtggagaatg  
 780  
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 840  
 ctctg  
 845

<210> 5782  
 <211> 147  
 <212> PRT  
 <213> Homo sapiens

<400> 5782  
 Gly Val Pro Cys Pro Lys Ile. Glu Gly Ala Val Gly Leu Gly Ser Gly  
 1 5 10 15  
 Ser Arg Pro Arg Gly Ala Gly Val Arg Cys His Phe Cys Gly Val Asn  
 20 25 30  
 Ala Pro Thr Leu Ala Asp Phe Lys Pro Pro Gly Glu Asp Gly Thr Ala  
 35 40 45  
 Thr Ser Ser Thr Glu Ala Pro Ala Ala Leu Ser Gly Thr Ser Gly Pro  
 50 55 60  
 Gly Xaa Ser Ser Pro Pro Gly Gly Pro Gly Leu Gly Pro Leu Pro Ala  
 65 70 75 80  
 Pro Glu Ala Leu Gln Pro Gly Val Gln Arg Gly Gly Pro Ala Gly His

```

      100      105      110
Gln Arg Arg Ala Gly Pro Pro Thr Tyr Val Pro Gly Cys Leu Arg Gln
      115      120      125
Ala Ala Arg Ser Pro Lys Leu Val Arg Ala Thr Trp Val Thr Ala Ala
      130      135      140
Val Pro Gly Arg Lys Arg Ser Leu Ala Pro Glu Gln Pro Ile Leu Gly
145      150      155      160
Pro Ser Gln Val

```

&lt;210&gt; 5779

&lt;211&gt; 371

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5779

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ctcttgagac gtgtggaggg aaggaagggg agaacccatg atctacccca gaggcattga
60
cgggagagag ggggtgatttc agccttgctc ggcattccctt gtgtctgcnt gaggggtgtgt
120
gcacacggga atgtgtgcgg gtgtgtgtgc gtgcattgcag ctgtgtgtgg atgtgcantc
180
gtgtgtgggt gtgtaggtgt gtgtgggtgt gtgcaccagt gcagggtgtgc atgggtgtgt
240
acagggtgggt gtgtgtatgt gtgtgggggt gtgcccatct gtgcagggtgt gtgggtgtgc
300
agggtcncat gcctgtgtgt ggggtgtgncc ccgtgtgtac ccctgtggag gtgtgtgggt
360
gtgtgcagtg t
371

```

&lt;210&gt; 5780

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5780

```

Leu Leu Arg Arg Val Glu Gly Arg Lys Gly Arg Thr His Asp Leu Pro
1      5      10      15
Gln Arg His Gly Arg Glu Arg Gly Val Ile Ser Ala Leu Ser Gly Ile
20      25      30
Pro Cys Val Cys Xaa Arg Val Cys Ala His Gly Asn Val Cys Gly Cys
35      40      45
Val Cys Val His Ala Ala Val Cys Gly Cys Ala Xaa Val Cys Gly Cys
50      55      60
Val Gly Val Cys Gly Cys Val His Gln Cys Arg Cys Ala Trp Val Cys
65      70      75      80
Thr Gly Gly Cys Val Tyr Val Cys Gly Gly Val Pro Ile Cys Ala Gly
85      90      95
Val Trp Val Cys Arg Val Xaa Cys Leu Cys Val Gly Val Xaa Pro Cys
100      105      110
Val Pro Leu Trp Arg Cys Val Gly Val Cys Ser
115      120

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tttctgaagg ctgtggaaga ggttgagtg ggcgcattctt agcttgcccc atccccattt  
 480  
 gaggtctgtc ggagctgccc ttcagtgtga gcatccacaa tgggtacccc agcctcgggtg  
 540  
 gtcagtgage caccctcttg gcaggccccg attgaggccc ggggcccgaac gcaggcctcg  
 600  
 gccaacatct tccaggacgc cgagctgctg cagatccaag ccctgtttca acgcagcggg  
 660  
 gaccagctgg ccgaggaacg ggcacagatc atctgggaat gtgcagggga ccaccgtgtg  
 720  
 gctgaggccc tcaagaggct gcgcaggaag agggcccccac gccagaaacc ccctggggcca  
 780  
 ctgcgtacac cactgcagcc gcctcagaat cctggagccc cactctgcac tggccaaccc  
 840  
 acagagtgcc acagagacag cctccagtga gcagtatctg cactctagga agaaaagtgc  
 900  
 caggatccgc cggaactgga ggaagtcagg cccacaagc tacctccacc agatcagaca  
 960  
 ctgatccagg gaaagagcca ggaatggcag tgtcttccct cttgccaaaa ggcttgggga  
 1020  
 ggtgaaggaa gagagacttt aggcaagcag cccaaagggg taaatgaaag caagaggctg  
 1080  
 ctgccactga cctgctccat tcagaacaag actggatgct tctgttgagc tctccattat  
 1140  
 gtgggaccca ttctcacca aaatgaggag agacagtgc tggtcctgcc acagtccttc  
 1200  
 ccagtctaac actattcctg ggctgcatga tattccccctg ggagcaaagt gacaggcact  
 1260  
 tagatgcagc atttcaccac tcatgtact aatcatctac ctgctactac tgtaaacctat  
 1320  
 ggttcagca gcctgttcca cccccacac ccatcaggat agcacaggga aactgtagtt  
 1380  
 taagtggcaa ataaaaacat ttgcatcaaa aaaaaaaaaa aaaaaaaaaa a  
 1431

&lt;210&gt; 5778

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5778

Met Leu Thr Leu Lys Gly Ser Ser Asp Arg Pro Gln Met Gly Met Gly  
 1 5 10 15  
 Gln Ala Lys Met Arg Pro Leu Gln Pro Leu Pro Gln Pro Ser Glu Arg  
 20 25 30  
 Ala Gly Ala Ala Leu Gly Phe Leu Leu Arg Arg Cys Leu Gln Gly Pro  
 35 40 45  
 Val Gly Asp His Gly Gln His Lys Ser Met Ala Glu Gly Ile Leu Ala  
 50 55 60  
 Glu Val Leu Arg Arg His Leu Gln His Glu Glu Ala Pro Gly Leu Arg  
 65 70 75 80  
 Arg Gly Arg Phe Ala Glu Arg Arg Gly Pro Lys Trp Ile Trp Arg Ser  
 85 90 95  
 Arg Pro Ala Gly Thr Pro Ala Leu Thr Val Ala Leu Arg Leu Pro Pro

```

      100      105      110
Pro Glu Gly Ala Pro Glu Arg Ala Ala Glu Leu Gly Val Asn Phe Gly
      115      120      125
Arg Ser Arg Gln Gly Ser Ala Arg Gly Thr Lys Pro His Arg Cys Glu
      130      135      140
Ala Cys Gly Lys Ser Phe Lys Tyr Asn Ser Leu Leu Leu Lys His Gln
145      150      155      160
Arg Ile His Thr Gly Glu Lys Pro Tyr Ala Cys His Glu Cys Gly Lys
      165      170      175
Cys Phe Ala Ala Ala Ser Arg Phe Ile Gln His Gln Arg Ile His Ser
      180      185      190
Gly Glu Lys Pro Tyr Ala Cys Pro Glu Cys Ser Lys Thr Phe Thr Arg
      195      200      205
Ser Ser Asn Leu Ile Lys His Gln Val Ile His Ser Gly Glu Arg Pro
      210      215      220
Phe Ala Cys Gly Asp Cys Gly Lys Leu Phe Arg Arg Ser Phe Ala Leu
225      230      235      240
Leu Glu His Ala Arg Val His Ser Gly Glu Lys Pro Tyr Glu Cys Ser
      245      250      255
Asp Cys Gly Lys Cys Phe Arg Gly Arg Ser His Phe Phe Arg His Asn
      260      265      270
Arg Thr His Thr Gly Glu Lys Pro Tyr His Cys Leu Asp Cys Gly Lys
      275      280      285
Ser Phe Ser His Ser Ser His Leu Ile Lys His Gln Arg Thr His Arg
      290      295      300
Gly Val Arg Pro Tyr Ala Cys Pro Leu Cys Gly Lys Ser Phe Ser Arg
305      310      315      320
Arg Ser Asn Leu His Arg His Glu Lys Ile His Thr Thr Gly Pro Lys
      325      330      335
Ala Leu Ala Met Leu Met Leu Gly Ala Ala Ala Gly Ala Leu Ala
      340      345      350
Thr Pro Pro Pro Ala Pro Thr
      355

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&lt;210&gt; 5777

&lt;211&gt; 1431

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5777

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60

gggagcgctt tctcccggga accgcggctg tgacccaagt ggcccggacc agtttggggc  
120

tgcgtagcggc ctgcctcaag caaccaggta cgtaggtcgg cggcccagct cggcgctgcg  
180

gtgggagccg gagggcgaca gtcagagccg gggtgccagc gggacgagac cgccagatcc  
240

acttaggacc ccgtcgttct gcgaagcggc cacgtctgag tcccggggcc tcctcgctgt  
300

gcagatgtcg ccttaggacc tcggccagga taccctctgc catgctcttg tgctgcccgt  
360

gatcaccgac tggcccttgt aagcaccttc gcagcaggaa gccagagct gcgcctgcc  
420

ctctgtgcagc aagcagcggc cgggcccag ggtgcgccc agcgggctgc cgagctggga  
 540  
 gtcaacttcg gtcggagccg gcagggcagc gcgcggggga ccaagccgca caggtgagag  
 600  
 gcctgaggca agagtttcaa gtataactcg ctgctcctga agcaccagcg catccacacg  
 660  
 ggcgagaagc cctacgcctg ccacgagtgc ggcaagtgtt tcgccgcagc ttcgcgcttc  
 720  
 atccagcacc agcgcattca cagcggcgag aagccctacg cctgccccga gtgcagcaag  
 780  
 accttcacgc gcagctccaa cctcatcaag caccaggtca tccacagcgg cgagcggccc  
 840  
 ttgcctgagc gcgactgcgg caaactgttc cgccgcagct tcgcgctcct ggagcacgag  
 900  
 cgcgtgcaca ggcggcagaa gccctacgag tgctccgact gcggcaagtg cttccgcggc  
 960  
 cgctcgact tcttcggca caaccgcaca cacacggcg agaagcccta cactgcctc  
 1020  
 gactgcggca agagcttcag ccacagctcg cacctcatca agcaccagcg caccacagc  
 1080  
 ggcgtgcggc cctacgcctg cccgttgtgt ggcaagagct tcagccggcg ctccaacctg  
 1140  
 caccggcacg agaagatcca caccaccggg cccaaggccc tggccatgct gatgctggg  
 1200  
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 1260  
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 1320  
 ggagagaggg gctcgggaag ggagctgggg cggtgagggc atgggggtgag gcatggcgat  
 1380  
 gggggagggc gagggcgaga aagggcaggc actctgcgaa ttaaaggcct tggacttgaa  
 1440  
 a  
 1441

&lt;210&gt; 5776

&lt;211&gt; 359

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5776

Met	Gly	Ile	Asn	Met	Pro	Lys	Val	Leu	Ser	Gln	Pro	Ser	Asp	Leu	Asp
1				5				10						15	
Leu	Gln	Asp	Val	Glu	Glu	Val	Glu	Ile	Gly	Arg	Asp	Thr	Phe	Trp	Pro
		20					25						30		
Asp	Ser	Glu	Pro	Lys	Pro	Glu	Gln	Ala	Pro	Arg	Ser	Pro	Gly	Ser	Gln
		35				40						45			
Ala	Pro	Asp	Glu	Gly	Ala	Gly	Gly	Ala	Leu	Arg	Thr	Ser	Val	Arg	Ser
	50				55			60							
Leu	Pro	Arg	Arg	Ala	Arg	Cys	Ser	Ala	Gly	Phe	Gly	Pro	Glu	Ser	Ser
65				70				75					80		
Ala	Glu	Arg	Pro	Ala	Gly	Gln	Pro	Pro	Gly	Ala	Val	Pro	Cys	Ala	Gln
			85				90						95		
Pro	Arg	Gly	Ala	Trp	Arg	Val	Thr	Leu	Val	Gln	Gln	Ala	Ala	Ala	Gly

tcggg'gcac ggtgagcaag cgcagcagcc tggacgagaa gcagaagcga gaggaggagg  
 360  
 agaagaaagc ggagttcgag cggcagcgaa aaattcgaca gcaagaaata gaagaaaaac  
 420  
 tcatcgagga agaaacagca cgaagagtag aagaattggt agcaanaaag ggtggaggaa  
 480  
 gaactggaga aaaggaagga tgaattgaa cgagaagttc tccgaagggt ggaggaagcc  
 540  
 aaacgcatca tggaaaagca gttgctcgaa gaactcgag  
 579

<210> 5774

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5774

Xaa	Arg	Val	Arg	Gly	Leu	Arg	Arg	Ala	Val	Arg	Ala	Ser	Pro	Gly	Arg
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Met	Gly	Arg	Ser	Arg	Ser	Arg	Ser	Ser	Ser	Arg	Ser	Lys	His	Thr	Lys
			20					25					30		
Ser	Ser	Lys	His	Asn	Lys	Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg
		35					40					45			
Asp	Lys	Glu	Arg	Val	Arg	Lys	Arg	Ser	Lys	Ser	Arg	Glu	Ser	Lys	Arg
	50					55					60				
Asn	Arg	Arg	Arg	Glu	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Thr	Asn	Thr	Ala
65				70					75					80	
Val	Ser	Arg	Arg	Glu	Arg	Asp	Arg	Glu	Arg	Pro	Arg	Pro	Arg	Pro	Thr
			85					90						95	
Ala	Ser	Thr	Ser	Ser	Gly	Ala	Arg								
															100

<210> 5775

<211> 1441

<212> DNA

<213> Homo sapiens

<400> 5775

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 120  
 caccggggac acctggaacc cagcaccacg agcctcagct tcacctccat gggcatcaac  
 180  
 atgcctaagg tgctctccca gccgtccgac ctggatctcc aagacgtaga ggaagtggag  
 240  
 atcggcagag acaccttctg gcccgactcc gagcccaagc cggagcaggc tccacgctct  
 300  
 cctggctctc agggccctga cgagggggcg ggcggggcgc tgcgcacctc cgtgaggagc  
 360  
 cttccccgca gggcccggtg cagcgccggc ttcgggctg aatccagcgc ggagcgggcg  
 420  
 gcgggccagc cgctggggc cgctccttgc gccagccgc ggggcgctg gcgctgacg  
 480

355	360	365
Thr Trp Glu Pro Pro Phe Ser Asp Glu Ser Cys Ser Pro Val Ser Cys		
370	375	380
Gly Lys Pro Glu Ser Pro Glu His Gly Phe Val Val Gly Ser Lys Tyr		
385	390	395
Thr Phe Glu Ser Thr Ile Ile Tyr Gln Cys Glu Pro Gly Tyr Glu Leu		400
	405	410
		415
Glu Gly Asn Arg Glu Arg Val Cys Gln Glu Asn Arg Gln Trp Ser Gly		
	420	425
		430
Gly Val Ala Ile Cys Lys Glu Thr Arg Cys Glu Thr Pro Leu Glu Phe		
	435	440
		445
Leu Asn Gly Lys Ala Asp Ile Glu Asn Arg Thr Thr Gly Pro Asn Val		
	450	455
		460
Val Tyr Ser Cys Asn Arg Gly Tyr Ser Leu Glu Gly Pro Ser Glu Ala		
465	470	475
His Cys Thr Glu Asn Gly Thr Trp Ser His Pro Val Pro Leu Cys Lys		480
	485	490
		495
Pro Asn Pro Cys Pro Val Pro Phe Val Ile Pro Glu Asn Ala Leu Leu		
	500	505
		510
Ser Glu Lys Glu Phe Tyr Val Asp Gln Asn Val Ser Ile Lys Cys Arg		
	515	520
		525
Glu Gly Phe Leu Leu Gln Gly His Gly Ile Ile Thr Cys Asn Pro Asp		
	530	535
		540
Glu Thr Trp Thr Gln Thr Ser Ala Lys Cys Glu Lys Ile Ser Cys Gly		
545	550	555
Pro Pro Ala His Val Glu Asn Ala Ile Ala Arg Gly Val His Tyr Gln		560
	565	570
		575
Tyr Gly Asp Met Ile Thr Tyr Ser Cys Tyr Ser Gly Tyr Met Leu Glu		
	580	585
		590
Gly Phe Leu Arg Ser Val Cys Leu Glu Asn Gly Thr Trp Thr Ser Pro		
	595	600
		605
Pro Ile Cys Arg Ala Val Cys Arg Phe Pro Cys Gln Asn Gly Gly His		
	610	615
		620
Leu Pro Thr Pro Lys Cys Leu Phe Leu Ser Arg Gly Leu Asp Gly Ala		
625	630	635
		640
Pro Leu		

&lt;210&gt; 5773

&lt;211&gt; 579

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5773

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60

cgagaccgga gctcgtccc ctccaagcac accaagagca gcaagcacia caagaagcgc  
120

agccgggtccc ggtcgcgac ccgggacaag gacgcggtgc ggaagcgttc caaatctcgg  
180

gaaagtaaac ggaaccggcg gcgggagtcg cggtcccgtt cgcgctccac caacacggcc  
240

gtgtcccggc gcgagcggga ccgggagcgc cctcgtcccc gccgaccgc atcgacatct  
300

tgctactaaa taaaaaaaaa

2539

&lt;210&gt; 5772

&lt;211&gt; 642

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5772

Tyr Thr Cys Asn Glu Gly Phe Leu Leu Glu Gly Ala Arg Ser Arg Val  
 1 5 10 15  
 Cys Leu Ala Asn Gly Ser Trp Ser Gly Ala Thr Pro Asp Cys Val Pro  
 20 25 30  
 Val Arg Cys Ala Thr Pro Pro Gln Leu Ala Asn Gly Val Thr Glu Gly  
 35 40 45  
 Leu Asp Tyr Gly Phe Met Lys Glu Val Thr Phe His Cys His Gly Leu  
 50 55 60  
 His Leu Ala Arg Cys Ser Lys Thr His Leu Ser Val Arg Gly Asn Trp  
 65 70 75 80  
 Asp Ala Glu Ile Pro Leu Cys Lys Pro Val Asn Cys Gly Pro Pro Glu  
 85 90 95  
 Asp Leu Ala His Gly Phe Pro Asn Gly Phe Ser Phe Ile His Gly Gly  
 100 105 110  
 His Ile Gln Tyr Gln Cys Phe Pro Gly Tyr Lys Leu His Gly Asn Ser  
 115 120 125  
 Ser Arg Arg Cys Leu Ser Asn Gly Ser Trp Ser Gly Ser Ser Pro Ser  
 130 135 140  
 Cys Leu Pro Cys Arg Cys Ser Thr Pro Val Ile Glu Tyr Gly Thr Val  
 145 150 155 160  
 Asn Gly Thr Asp Phe Asp Cys Gly Lys Ala Ala Arg Ile Gln Cys Phe  
 165 170 175  
 Lys Gly Phe Lys Leu Leu Gly Leu Ser Glu Ile Thr Cys Glu Ala Asp  
 180 185 190  
 Gly Gln Trp Ser Ser Gly Phe Pro His Cys Glu His Thr Ser Cys Gly  
 195 200 205  
 Ser Leu Pro Met Ile Pro Asn Ala Phe Ile Ser Glu Thr Ser Ser Trp  
 210 215 220  
 Lys Glu Asn Val Ile Thr Tyr Ser Cys Arg Ser Gly Tyr Val Ile Gln  
 225 230 235 240  
 Gly Ser Ser Asp Leu Ile Cys Thr Glu Lys Gly Val Trp Asn Gln Pro  
 245 250 255  
 Tyr Pro Val Cys Glu Pro Leu Ser Cys Gly Ser Pro Pro Ser Val Ala  
 260 265 270  
 Asn Ala Val Ala Thr Gly Glu Ala His Thr Tyr Glu Ser Glu Val Lys  
 275 280 285  
 Leu Arg Cys Leu Glu Gly Tyr Thr Met Asp Thr Asp Thr Asp Thr Ile  
 290 295 300  
 Thr Cys Gln Lys Asp Gly Arg Trp Phe Pro Glu Arg Ile Ser Cys Ser  
 305 310 315 320  
 Pro Lys Lys Cys Pro Leu Pro Glu Asn Ile Thr His Ile Leu Val His  
 325 330 335  
 Gly Asp Asp Phe Ser Val Asn Arg Gln Val Ser Val Ser Cys Ala Glu  
 340 345 350  
 Gly Tyr Thr Phe Glu Gly Val Asn Ile Ser Val Cys Gln Leu Asp Gly

gaaggttata cgatggatac agatacagat acaatcacct gtcagaaaaga tggtcgctgg  
960  
ttccctgaga gaatctcctg cagtcctaaa aaatgtcctc tcccggaaaa cataacacat  
1020  
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&lt;211&gt; 427

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5769

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427

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&lt;210&gt; 5768

&lt;211&gt; 360

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5768

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&lt;210&gt; 5767

&lt;211&gt; 1910

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5767

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      385      390      395      400
Thr Met Ala Val Phe Tyr Ser Ser Ala Ala Pro Arg Pro Val Asp Glu
      405      410      415
Pro Ala Met Lys Arg Pro Arg Thr Ala Gly Pro Ala Val His Leu Lys
      420      425      430
Ala Met Gln Leu Ser Trp Thr Ser Leu Ala Leu Val Gly Ile Asp Ser
      435      440      445
His Gly Lys Leu Ser Val Leu Arg Leu Ser Pro Ser Met Gly His Pro
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Leu Glu Val Gly Leu Ala Leu Arg His Leu Leu Phe Leu Leu Glu Tyr
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Cys Met Val Thr Gly Tyr Asp Trp Trp Asp Ile Leu Leu His Val Gln
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Pro Ser Met Val Gln Ser Leu Val Glu Lys Leu His Glu Glu Tyr Thr
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Arg Gln Thr Ala Ala Leu Gln Gln Val Leu Ser Thr Arg Ile Leu Ala
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Lys Ser Leu Leu Arg Pro His Phe Leu Asn Thr Pro Asp Lys Ser Pro
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Asp Lys Val Met Ile Asn Leu Lys Thr Glu Glu Phe Val Leu Asp Met
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      740      745      750
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 <213> Homo sapiens

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5765

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Tyr Tyr Leu Ala Cys Gly Phe Cys Arg Trp Thr Ser Arg Asp Val Gly
          115          120          125
Met Ala Asp Lys Ser Val Ala Ser Gly Gly Trp Gln Glu Pro Glu Asn
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Pro His Thr Gln Arg Met Asn Lys Leu Ile Glu Tyr Tyr Gln Gln Leu
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Ala Gln Lys Glu Lys Val Glu Arg Asp Arg Lys Lys Leu Ala Arg Arg
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Arg Pro Val Asn Leu Thr Glu Val Thr Thr Leu Gln Gln Arg Leu Leu
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Lys His Leu Leu Ile Lys Arg Ser Leu Arg Cys Arg Lys Cys Glu His
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Gln Leu Val Ala Val Asn Tyr Ile Pro Glu Val Arg Ile Met Ser Ile
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Pro Asn Leu Arg Tyr Met Lys Glu Ser Gln Val Leu Leu Thr Leu Thr
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Gly Asp Pro Asp Asp Ile Asn Ser Thr Ala Lys Val Val Val Pro Pro
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Lys Glu Leu Val Leu Ala Gly Lys Asp Ala Ala Ala Glu Tyr Asp Glu
          370          375          380
Leu Ala Glu Pro Gln Asp Phe Gln Asp Asp Pro Asp Ile Ile Ala Phe
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Arg Lys Ala Asn Lys Val Gly Ile Phe Ile Lys Val Thr Pro Gln Arg
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Glu Glu Gly Glu Val Thr Val Cys Phe Lys Met Lys His Asp Phe Lys
          420          425          430
Asn Leu Ala Ala Pro Ile Arg Pro Ile Glu Glu Ser Asp Gln Gly Thr
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Glu Val Ile Trp Leu Thr Gln His Val Glu Leu Ser Leu Gly Pro Leu
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&lt;211&gt; 3220

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&lt;210&gt; 5764

&lt;211&gt; 466

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5764

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 Leu Tyr Phe Cys Arg Tyr Cys Ser Glu Leu Arg Ser Leu Glu Cys Val  
 35 40 45  
 Ser His Glu Val Asp Ser His Tyr Cys Pro Ser Cys Leu Glu Asn Met  
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<210> 5762

<211> 333

<212> PRT

<213> Homo sapiens

<400> 5762

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Glu	Asn	Ala	Gln	Pro	Thr	Glu	Gly	Glu	Arg	Glu	Ile	Trp	Asn	Gln	Ile
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Ser	Ala	Val	Leu	Gln	Asp	Ser	Glu	Ser	Ile	Leu	Ala	Asp	Leu	Gln	Ala
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Tyr	Lys	Gly	Ala	Gly	Pro	Glu	Ile	Arg	Asp	Ala	Ile	Gln	Asn	Pro	Asn
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Asp	Ile	Gln	Leu	Gln	Glu	Lys	Ala	Trp	Asn	Ala	Val	Cys	Pro	Leu	Val
			85						90					95	
Val	Arg	Leu	Lys	Arg	Phe	Tyr	Glu	Phe	Ser	Ile	Arg	Leu	Glu	Lys	Ala
		100						105					110		
Leu	Gln	Ser	Leu	Leu	Glu	Ser	Leu	Thr	Cys	Pro	Pro	Tyr	Thr	Pro	Thr
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Gln	His	Leu	Glu	Arg	Glu	Gln	Ala	Leu	Ala	Lys	Glu	Phe	Ala	Glu	Ile
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Leu	His	Phe	Thr	Leu	Arg	Phe	Asp	Glu	Leu	Lys	Met	Arg	Asn	Pro	Ala
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	210					215						220			
Pro	Ile	Glu	Asn	Thr	Thr	Asp	Cys	Leu	Ser	Thr	Met	Thr	Ser	Val	Cys
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&lt;210&gt; 5760

&lt;211&gt; 273

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5760

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Ile	Glu	Leu	Cys	Ser	Gly	Leu	Ser	Glu	Gly	Gly	Thr	Thr	Pro	Ser	Met
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Leu	Cys	Met	Ser	Leu	Met	Ala	Ile	Cys	Arg	Pro	Leu	Pro	Val	Thr	Phe
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&lt;210&gt; 5759

&lt;211&gt; 1333

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5759

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&lt;210&gt; 5758

&lt;211&gt; 440

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5758

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Phe	Ala	Trp	Glu	Ser	Ala	Asp	Ser	Gly	Leu	Glu	Val	Cys	Pro	Glu	Asp
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Ile	Tyr	Gly	Val	Gln	Glu	Val	His	Val	Asn	Gly	Ala	Val	Val	Leu	Ala
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Phe	Glu	Leu	Tyr	Tyr	His	Thr	Thr	Gln	Asp	Leu	Gln	Leu	Phe	Arg	Glu
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Gly	Gly	Gly	Trp	Glu	Val	Val	Arg	Ala	Val	Ala	Lys	Phe	Trp	Cys	Ser
			100					105					110		
Arg	Val	Glu	Trp	Ser	Pro	Arg	Glu	Lys	Tyr	His	Leu	Arg	Gly	Val	
		115				120					125				
Met	Ser	Pro	Asp	Glu	Tyr	His	Ser	Gly	Val	Asn	Asn	Ser	Val	Tyr	Thr
		130				135					140				
Asn	Val	Leu	Val	Gln	Asn	Ser	Leu	Arg	Phe	Ala	Ala	Ala	Leu	Ala	Gln
145					150					155				160	
Asp	Leu	Gly	Leu	Pro	Ile	Pro	Ser	Gln	Trp	Leu	Ala	Val	Ala	Asp	Lys
			165					170						175	
Ile	Lys	Val	Pro	Phe	Asp	Val	Glu	Gln	Asn	Phe	His	Pro	Glu	Phe	Asp
		180						185					190		
Gly	Tyr	Glu	Pro	Gly	Glu	Val	Val	Lys	Gln	Ala	Asp	Val	Val	Leu	Leu
		195				200						205			
Gly	Tyr	Pro	Val	Pro	Phe	Ser	Leu	Ser	Pro	Asp	Val	Arg	Arg	Lys	Asn
		210				215					220				
Leu	Glu	Ile	Tyr	Glu	Ala	Val	Thr	Ser	Pro	Gln	Gly	Pro	Ala	Met	Thr
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Trp	Ser	Met	Phe	Ala	Val	Gly	Trp	Met	Glu	Leu	Lys	Asp	Ala	Val	Arg

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1920

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      130              135              140
Ile Pro Val Phe Ala Asn Gly Asn Ile Gln Cys Leu Gln Asp Val Glu
145              150              155              160
Arg Cys Leu Arg Asp Thr Gly Val Gln Gly Val Met Ser Ala Glu Gly
      165              170              175
Asn Leu His Asn Pro Ala Leu Phe Glu Gly Arg Ser Pro Ala Val Trp
      180              185              190
Glu Leu Ala Glu Glu Tyr Leu Asp Ile Val Arg Glu His Pro Cys Pro
      195              200              205
Leu Ser Tyr Val Arg Ala His Leu Phe Lys Leu Trp His His Thr Leu
      210              215              220
Gln Val His Gln Glu Leu Arg Glu Glu Leu Ala Lys Val Lys Thr Leu
225              230              235              240
Glu Gly Ile Ala Ala Val Ser Gln Glu Leu Lys Leu Arg Cys Gln Glu
      245              250              255
Glu Ile Ser Arg Gln Glu Gly Ala Lys Pro Thr Gly Asp Leu Pro Phe
      260              265              270
His Trp Ile Cys Gln Pro Tyr Ile Arg Pro Gly Pro Arg Glu Gly Ser
      275              280              285
Lys Glu Lys Ala Gly Ala Arg Ser Lys Arg Ala Leu Glu Glu Glu Glu
      290              295              300
Gly Gly Thr Glu Val Leu Ser Lys Asn Lys Gln Lys Lys Gln Leu Arg
305              310              315              320
Asn Pro His Lys Thr Phe Asp Pro Ser Leu Lys Pro Lys Tyr Ala Lys
      325              330              335
Cys Asp Gln Cys Gly Asn Pro Lys Gly Asn Arg Cys Val Phe Ser Leu
      340              345              350
Cys Arg Gly Cys Cys Lys Lys Arg Ala Ser Lys Glu Thr Ala Asp Cys
      355              360              365
Pro Gly His Gly Leu Leu Phe Lys Thr Lys Leu Glu Lys Ser Leu Ala
      370              375              380
Trp Lys Glu Ala Gln Pro Glu Leu Gln Glu Pro Gln Pro Ala Ala Pro
385              390              395              400
Gly Thr Pro Gly Gly Phe Ser Glu Val Met Gly Ser Ala Leu Ala
      405              410              415

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&lt;210&gt; 5757

&lt;211&gt; 2362

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5757

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&lt;210&gt; 5756

&lt;211&gt; 415

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5756

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Pro	Leu	Ile	Val	Gln	Phe	Cys	Ala	Asn	Asp	Pro	Glu	Val	Phe	Val	Gln
			20					25					30		
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		35					40					45			
Gly	Cys	Pro	Gln	Met	Ile	Ala	Lys	Arg	Gly	His	Tyr	Gly	Ala	Phe	Leu
	50				55					60					
Gln	Asp	Glu	Trp	Asp	Leu	Leu	Gln	Arg	Met	Ile	Leu	Leu	Ala	His	Glu
65					70				75					80	
Lys	Leu	Ser	Val	Pro	Val	Thr	Cys	Lys	Ile	Arg	Val	Phe	Pro	Glu	Ile
			85					90					95		
Asp	Lys	Thr	Val	Arg	Tyr	Ala	Gln	Met	Leu	Glu	Lys	Ala	Gly	Cys	Gln
			100				105						110		
Leu	Leu	Thr	Val	His	Gly	Arg	Thr	Lys	Glu	Gln	Lys	Gly	Pro	Leu	Ser

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	20	25	30
Phe Pro Asn His Thr Asp Asn Leu Asn Ser Ser Gln Arg Leu Ser Pro			
	35	40	45
Ser Ser Arg Met Arg Lys Leu Pro Gln Gly Arg Pro Val Pro Pro Leu			
	50	55	60
Gly Pro Glu Thr Arg Val Ser Val Val Trp Val Glu Arg Tyr Asp Asp			
65	70	75	80
Ile Glu Asn Phe Pro Leu Ser Glu Leu Met Thr Glu Ile Ser Thr Gly			
	85	90	95
Val Glu Thr Thr Ala Asn Ser Ser Thr Ser Leu Arg Ser Thr Thr Leu			
	100	105	110
Glu Lys Glu Val Pro Val Ile Phe Ile His Pro Leu Asn Thr Gly Leu			
	115	120	125
Phe Arg Ile Lys Ile Gln Gly Ala Thr Gly Lys Phe Asn Met Val Ile			
	130	135	140
Pro Leu Val Asp Gly Met Ile Val Ser Arg Arg Ala Leu Gly Phe Leu			
145	150	155	160
Val Arg Gln Thr Val Ile Asn Ile Cys Arg Arg Lys Arg Leu Glu Ser			
	165	170	175
Asp Ser Tyr Ser Pro Pro His Val Arg Arg Lys Gln Lys Ile Thr Asp			
	180	185	190
Ile Val Asn Lys Tyr Arg Asn Lys Gln Leu Glu Pro Glu Phe Tyr Thr			
	195	200	205
Ser Leu Phe Gln Glu Val Gly Leu Lys Asn Cys Ser Ser			
210	215	220	

&lt;210&gt; 5755

&lt;211&gt; 1513

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5755

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5668

&lt;210&gt; 5754

&lt;211&gt; 221

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5754

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2700

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	85	90
Pro Met Phe Leu Ala Leu Asp Arg Arg Gly Gly Pro Arg Pro Gly Gly		95
	100	105
Arg Thr Arg Arg Tyr His Leu Ser Ala His Phe Leu Pro Val Leu Val		110
	115	120
Ser		125

&lt;210&gt; 5753

&lt;211&gt; 5668

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5753

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960
gtggttcctt ctctgtgga gtccttaact gattcattgg aaagtaacat ctcggaacaa
1020
gatagtgatt caaatatgga tcttatgcca ggaattctga aacagccatc cctgacactt
1080

```

515

520

&lt;210&gt; 5751

&lt;211&gt; 926

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5751

ngcgggcatg gccaggcggg gtggcctcgg gccggggcag aggcctggct ccgctgcctg  
 60  
 acctggaaca gtctctgcct ctctccaagc ctcggtttcc ccagctggac ggtgatgggg  
 120  
 gtgagggcta gctgagggct ctctgcctt tcgtgcattc gctggtcact aatcgggcac  
 180  
 cttgtgggtg ctgtgctccg catgggggac ccagtgggtga cagagacgcc caccctcctg  
 240  
 gggctcccag agcagaggcg cgcagcagtt agacacgtga acaaggggcg aggcacacctg  
 300  
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 360  
 gtggccatga accgccgggg ccgcctctac gggtcgcgac tctacaccgt ggactgcagg  
 420  
 ttccggggagc gcatcgaaga gaacggccac aacacctacg cctcacagcg ctggcgccgc  
 480  
 cgcggccagc ccatgttctt ggcgctggac aggagggggg ggccccggcc aggcggccgg  
 540  
 acgcggcggg accacctgtc cgcaccactt ctgcccgtcc tggctctctg aggccttgag  
 600  
 aggcggcgcg ctccccaagg tgctgggct ggtggcgagg ggccccggca cgcttggtct  
 660  
 tccccctgcg ggctctgtaa gcgctgagtg cccaccgtgt gcgggcgctg tggacacagc  
 720  
 ccaggagccc tccagggggg tcccagcctg aggggggtgg ggccaccaag caggttcaat  
 780  
 cctgagttgg ggacctcgag gacccaacag ggcgcctctc gggctgaagg acgcagacgt  
 840  
 cgaaaggctg agggggacgt cccaggcagg gcccggcaga ggcaggggct cggggggggg  
 900  
 agcacgttgg gagtgggggc aggagc  
 926

&lt;210&gt; 5752

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5752

Met Gly Asp Pro Val Val Thr Glu Thr Pro Thr Leu Leu Gly Leu Pro  
 1 5 10 15  
 Glu Gln Arg Arg Ala Ala Val Arg His Val Asn Lys Gly Ala Gly Ile  
 20 25 30  
 Leu Glu Ile Arg Ser Val His Val Gly Val Val Val Ile Lys Ala Val  
 35 40 45  
 Ser Ser Gly Phe Tyr Val Ala Met Asn Arg Arg Gly Arg Leu Tyr Gly

4910

agggggaaat ctgactcaga ttcagtcfaat tcagtgtttt ctgacacacc ttttgtggcg  
 1860  
 tccacttaat ttgtgcctat atttgtatga tgtcataatt taatctgttc atatttaact  
 1920  
 ttgtgtgtgg tctgcaaaat aaacagcagg acagaaattg tgttgttttg ttctttgaaa  
 1980  
 tacaacaaaa ttctcttaaa atgattggta ggaaatgagg taaagtactt cagttcctca  
 2040  
 atgtgccata gaaagatggg gttgttttcc aaagttaaag ttctagatca caatatctta  
 2100  
 gcttttagca ctattggtaa tttcagagta ggcccaaagg tgatattgact cccattgtcc  
 2160  
 ctttatttag gatattgaaa gaaaaaataa actttatgta ttagtgtcct ttaaaaatag  
 2220  
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 2280  
 tttttaaaag atgtagaaag aagaatcaag catcaattaa ttataaagcc taaagcaaag  
 2340  
 ttagatttgg gggttattca gccaaaatta ccgttttaga ccagaatgaa tagactacac  
 2400  
 tgataaaatg tactggataa tgccacatcc tatatgggtg tatagaaata gtgcaaggaa  
 2460  
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 2520  
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 2580  
 aatacaaaaa tgtctgagta acttcttaaa tccctgttct agcaaaactaa tattggttca  
 2640  
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 2700  
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 2760  
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 2820  
 tataaagcac cactgatagc aaaaaaaaaa  
 2849

&lt;210&gt; 5750

&lt;211&gt; 522

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5750

Met	Ser	Leu	Arg	Val	His	Thr	Leu	Pro	Thr	Leu	Leu	Gly	Ala	Val	Val
1				5					10					15	
Arg	Pro	Gly	Cys	Arg	Glu	Leu	Leu	Cys	Leu	Leu	Met	Ile	Thr	Val	Thr
			20					25					30		
Val	Gly	Pro	Gly	Ala	Ser	Gly	Val	Cys	Pro	Thr	Ala	Cys	Ile	Cys	Ala
			35				40					45			
Thr	Asp	Ile	Val	Ser	Cys	Thr	Asn	Lys	Asn	Leu	Ser	Lys	Val	Pro	Gly
			50			55				60					
Asn	Leu	Phe	Arg	Leu	Ile	Lys	Arg	Leu	Asp	Leu	Ser	Tyr	Asn	Arg	Ile
65				70					75				80		
Gly	Leu	Leu	Asp	Ser	Glu	Trp	Ile	Pro	Val	Ser	Phe	Ala	Lys	Leu	Asn

actagtggta gtcagtttct gctttttact ccctctgaat tattaattgt ttgccaggtt  
240  
cactgggtggg aggetgagcc ggtggaaaag acaccgggaa gagactcaga ggcgaccata  
300  
atgtcgttac gtgtacacac tctgcccacc ctgcttgag cgcgtcgtcag accgggctgc  
360  
aggagctgc tgtgtttgct gatgatcaca gtgactgtgg gccctgggtgc ctctgggggtg  
420  
tgccccaccg cttgcatctg tgccactgac atcgtcagct gcaccaacaa aaacctgtcc  
480  
aagggtgcctg ggaacctttt cagactgatt aagagactgg acctgagtta taacagaatt  
540  
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600  
cgtcataaca acatcaccag catttccacg ggcagttttt ccacaactcc aaatttgaag  
660  
tgtcttgact tatcgtecaa taagctgaag acggtgaaaa atgctgtatt ccaagagttg  
720  
aagggttctg aagtgttct gctttacaac aatcacatat cctatctcga tccttcagcg  
780  
tttgaggggc tctcccagtt gcagaaactc tacttaagtg gaaattttct cacacagttt  
840  
ccgatggatt tgtatgttg aaggttcaag ctggcagaac tgatgttttt agatgtttct  
900  
tataaccgaa ttccttccat gccaatgcac cacataaatt tagtgccagg aaaacagctg  
960  
agaggcatct accttcatgg aaacctattt gtctgtgact gttccctgta ctccctgctg  
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1080  
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1140  
aattgtctctg acagcatcat caatgggtcc ttctgtgcgc ttggctttat tcatgaggct  
1200  
caggctcggg aaagactgat ggtccactgt gacagcaaga caggtaatgc aaatacggat  
1260  
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1320  
tacgtgtttc acaatggaag tctggttata gaaagccctc gttttgagga tgctggagtg  
1380  
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1440  
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1620  
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1680  
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1740  
gggaaagtca ggctctttcc cagcagggca gtgatagctg agggcatcct aaagtccacg  
1800

				165					170					175	
Phe	Pro	Asn	Glu	Asn	Leu	Pro	Ser	Lys	Met	Leu	Leu	Val	Tyr	Asp	Leu
			180					185					190		
Tyr	Leu	Ser	Pro	Lys	Leu	Trp	Ala	Leu	Ala	Thr	Pro	Gln	Lys	Asn	Gly
		195					200					205			
Arg	Val	Gln	Glu	Lys	Val	Met	Glu	His	Leu	Leu	Lys	Leu	Phe	Gly	Thr
	210					215					220				
Phe	Gly	Val	Ile	Ser	Ser	Val	Arg	Ile	Leu	Lys	Pro	Gly	Arg	Glu	Leu
225					230				235					240	
Pro	Pro	Asp	Ile	Arg	Arg	Ile	Ser	Ser	Arg	Tyr	Ser	Gln	Val	Gly	Thr
				245				250				255			
Gln	Glu	Cys	Ala	Ile	Val	Glu	Phe	Glu	Glu	Val	Glu	Ala	Ala	Ile	Lys
			260					265				270			
Ala	His	Glu	Phe	Met	Ile	Thr	Glu	Ser	Gln	Gly	Lys	Glu	Asn	Met	Lys
	275						280					285			
Ala	Val	Leu	Ile	Gly	Met	Lys	Pro	Pro	Lys	Lys	Lys	Pro	Ala	Lys	Asp
	290					295					300				
Lys	Asn	His	Asp	Glu	Glu	Pro	Thr	Ala	Ser	Ile	His	Leu	Asn	Lys	Ser
305					310					315				320	
Leu	Asn	Lys	Arg	Val	Glu	Glu	Leu	Gln	Tyr	Met	Gly	Asp	Glu	Ser	Ser
				325				330				335			
Ala	Asn	Ser	Ser	Ser	Asp	Pro	Glu	Ser	Asn	Pro	Thr	Ser	Pro	Met	Ala
			340					345				350			
Gly	Arg	Arg	His	Ala	Ala	Thr	Asn	Lys	Leu	Ser	Pro	Ser	Gly	His	Gln
	355						360					365			
Asn	Leu	Phe	Leu	Ser	Pro	Asn	Ala	Ser	Pro	Cys	Thr	Ser	Pro	Trp	Ser
	370					375				380					
Ser	Pro	Leu	Ala	Gln	Arg	Lys	Gly	Val	Ser	Arg	Lys	Ser	Pro	Leu	Ala
385				390						395				400	
Glu	Glu	Gly	Arg	Leu	Asn	Cys	Ser	Thr	Ser	Pro	Glu	Ile	Phe	Arg	Lys
				405				410				415			
Cys	Met	Asp	Tyr	Ser	Ser	Asp	Ser	Ser	Val	Thr	Pro	Ser	Gly	Ser	Pro
		420						425				430			
Trp	Val	Arg	Arg	Arg	Gln	Ala	Glu	Met	Gly	Thr	Gln	Glu	Lys	Ser	
	435					440					445				
Pro	Gly	Thr	Ser	Pro	Leu	Leu	Ser	Arg	Lys	Met	Gln	Thr	Ala	Asp	Gly
	450					455				460					
Leu	Pro	Val	Gly	Val	Leu	Arg	Leu	Pro	Arg	Gly	Pro	Asp	Asn	Thr	Arg
465					470				475				480		
Gly	Phe	His	Gly	His	Glu	Arg	Ser	Arg	Ala	Cys	Val				
				485				490							

&lt;210&gt; 5749

&lt;211&gt; 2849

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5749

gggtgagacg gtgggttgta tggagagaat gtgactgtac atttttataa gcaggactaa  
60

cccaggaaag aggaaaaaat acatttaaca gtgaagaggc aacacagagc tccctattgt  
120

gaaataaaac ccatttcaaa agttattgga aagaaagtaa ggtatggctc ttatgggtta  
180

tcctctgaca gcagcgtcac tccctctggc agccccctggg tccggaggcg tcgccaagcc  
 1320  
 gagatgggga cccaggagaa aagccccggt acgagtcgcc tgctctcccg gaagatgcag  
 1380  
 actgcagatg ggctaccctg aggggtgctg aggttgccca ggggtcctga caacaccaga  
 1440  
 ggatttcctg gccatgagag gagcagggcc tgtgtataaa taccttctat ttttaataca  
 1500  
 agctccactg aaaaccacct tcgttttcaa ggttctgaca aacacctggc atgacagaat  
 1560  
 ggaattcggt cccctttgag agatttttta ttcattgtaga cctcttaatt tatctatctg  
 1620  
 taatatacat aaatcggtag gccatgggtt gaagaccacc ttctagtcca ggactcctgt  
 1680  
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 1740  
 agggctgtag gacggagggt ccctggggga agtctgttct ttggtatgga atttttctct  
 1800  
 cttctttggt atggaatttt tcccttcagt gactgagctg tcctcgatag gccatgcaag  
 1860  
 ggcttctctga gagttcagga aagttctctt gtgcaacagc aagtagctaa gcctatagca  
 1920  
 tgggtgtcttg taggacaaaa tcgatgttac ctgtcaagta aataaataat aaaacaccca  
 1980  
 aaaaaaaaaa aaaaaaaaaa  
 1999

&lt;210&gt; 5748

&lt;211&gt; 492

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5748

Xaa Met Ala Gln Ser Gly Gly Glu Ala Arg Pro Gly Pro Lys Thr Ala  
 1 5 10 15  
 Val Gln Ile Arg Val Ala Ile Gln Glu Ala Glu Asp Val Asp Glu Leu  
 20 25 30  
 Glu Asp Glu Glu Gly Ala Glu Thr Arg Gly Ala Gly Asp Pro Ala  
 35 40 45  
 Arg Tyr Leu Ser Pro Gly Trp Gly Ser Ala Ser Glu Glu Glu Pro Ser  
 50 55 60  
 Arg Gly His Ser Gly Thr Thr Ala Ser Gly Gly Glu Asn Glu Arg Glu  
 65 70 75 80  
 Asp Leu Glu Gln Glu Trp Lys Pro Pro Asp Glu Glu Leu Ile Lys Lys  
 85 90 95  
 Leu Val Asp Gln Ile Glu Phe Tyr Phe Ser Asp Glu Asn Leu Glu Lys  
 100 105 110  
 Asp Ala Phe Leu Leu Lys His Val Arg Arg Asn Lys Leu Gly Tyr Val  
 115 120 125  
 Ser Val Lys Leu Leu Thr Ser Phe Lys Lys Val Lys His Leu Thr Arg  
 130 135 140  
 Asp Trp Arg Thr Thr Ala His Ala Leu Lys Tyr Ser Val Val Leu Glu  
 145 150 155 160  
 Leu Asn Glu Asp His Arg Lys Val Arg Arg Thr Thr Pro Val Pro Leu

	100		105		110
Leu Cys Ile	Leu Leu Trp	Pro Ala Val	Ser Ala Gly	Gly Ser Gln	Arg
115		120		125	
Gly Thr Gly	Arg Ala Ser	Pro Cys Arg	Thr Ala Glu		
130		135		140	

&lt;210&gt; 5747

&lt;211&gt; 1999

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5747

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nccatggccc agtccggcgg ggaggctcgg cccggggcca agacggcggg gcagatccgc
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120
actcggggcg ccggggaccc ggcccgttac ctacgccccg gctggggcag cgcgagcgag
180
gaggagccga gccgcgggca cagtggcacc actgcaagtg gaggtgagaa cgagcgtgag
240
gacctggagc aggagtggaa gcccccgat gaggagtga tcaagaaact ggtggatcag
300
atcgaattct acttttctga tgaaaacctg gagaaggacg cttttttgct aaaacacgtg
360
aggaggaaca agctgggata tgtgagcgtt aagctactca catccttcaa aaaggtgaaa
420
catcttacac gggactggag aaccacagca catgctttga agtattcagt ggtccttgag
480
ttgaatgagg accaccggaa ggtgaggagg accacccccg tccactgtt cccaacgag
540
aacctcccc acaagatgct cctgggtctat gatctctact tgtctcttaa gctgtgggct
600
ctggccaccc ccagaagaa tggaaggggtg caagagaagg tgatggaaca cctgctcaag
660
cttttcggga cttttggagt catctcatca gtgcggatcc tcaaacctgg gagagagctg
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780
atcgtggagt tcgaggaggt ggaagcagcc atcaaagccc atgagttcat gatcacagaa
840
tctcagggca aagagaacat gaaagctgtc ctgattggtg tgaagccacc caaaaagaaa
900
cctgccaag acaaaaatca tgacgaggag cccactgcga gcatccacct gaacaagtcc
960
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1020
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1080
aagctcagcc cgtctggcca ccagaatctc tttctgagtc caaatgcctc cccgtgcaca
1140
agtccttgga gcagcccctt ggcccaacgc aaaggcgttt ccagaaagtc cccactggcg
1200
gaggaaggta gactgaactg cagcaccagc cctgagatct tccgcaagtg tatggattat
1260

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5745

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aaagtttttt tttttttctg cttcaggcac acggggaacc acgcgtttta atcaacgtat
60
cgataaaaaa caccagggca cggacactcc aggggaaatg cttattgagt aaagtatccg
120
aggaagtgat gcagggcagg taaacagctg gtgctcagca gcgagaggac gcgtcactct
180
gccgttctgc aggggtgacgc cctccccgta cctcgctgag agccacctgc agacacagca
240
ggccacagca gaatgcacag gtcactgttg taggggaaca aatcgtaatg cccagagaaa
300
acctgatagt gaaatgtaaa cagacaggac aggggtggttc caggtggcca ccaccgccag
360
gcccttcccc tgattgatct gagagcttca cagccggcgg cactgggacc catttccaga
420
aacactggaa caccaggtct ctcatatgcc cgccggaggg gccccaggga ggcctttctc
480
agcatcagct tttgggtgac aaaccccata cagcaaaact gtacaaatac acacaacgga
540
ccccagctg acagtgagac caggacccta ggaaggtcag gtggtggtga agtcatcccc
600
tctccaaccg agcagagcct ggggttgggc tctgatgacc tcccgggcaa agtgtccagg
660
tggaggaagc aaactcccaa atggggcaca aaggtaataa aaagcagctg agagattgcg
720
ggatggggtc ggggccactt ggccgacacc ttctgcctcg cctggccggg ccggggccagc
780
ctctgccac aggatggagg gtgactgtgc accctgctcc atgtacagga cgggttgagg
840
gtcccatgg
849

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&lt;210&gt; 5746

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5746

```

Met Thr Ser Pro Pro Pro Asp Leu Pro Arg Val Leu Val Ser Leu Ser
 1             5             10             15
Ala Gly Gly Pro Leu Cys Val Phe Val Gln Phe Cys Cys Met Gly Phe
      20             25             30
Val Thr Gln Lys Leu Met Leu Arg Lys Ala Ser Leu Gly Pro Leu Pro
      35             40             45
Arg Ala Ser Glu Arg Pro Gly Val Pro Val Phe Leu Glu Met Gly Pro
      50             55             60
Ser Ala Ala Gly Cys Glu Ala Leu Arg Ser Ile Thr Gly Arg Ala Trp
      65             70             75             80
Arg Trp Trp Pro Pro Gly Thr Thr Leu Ser Cys Leu Phe Thr Phe His
      85             90             95
Tyr Gln Val Phe Ser Gly His Tyr Asp Leu Phe Pro Tyr Asn Ser Asp

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4903

&lt;211&gt; 427

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5742

Gly Gly Cys Cys Ser Gly Pro Gly His Ser Lys Arg Arg Arg Gln Ala  
 1 5 10 15  
 Pro Gly Val Gly Ala Val Gly Gly Gly Ser Pro Glu Arg Glu Glu Val  
 20 25 30  
 Gly Ala Gly Tyr Asn Ser Glu Asp Glu Tyr Glu Ala Ala Ala Arg  
 35 40 45  
 Ile Glu Ala Met Asp Pro Ala Thr Val Glu Gln Gln Glu His Trp Phe  
 50 55 60  
 Glu Lys Ala Leu Arg Asp Lys Lys Gly Phe Ile Ile Lys Gln Met Lys  
 65 70 75 80  
 Glu Asp Gly Ala Cys Leu Phe Arg Ala Val Ala Asp Gln Val Tyr Gly  
 85 90 95  
 Asp Gln Asp Met His Glu Val Val Arg Lys His Cys Met Asp Tyr Leu  
 100 105 110  
 Met Lys Asn Ala Asp Tyr Phe Ser Asn Tyr Val Thr Glu Asp Phe Thr  
 115 120 125  
 Thr Tyr Ile Asn Arg Lys Arg Lys Asn Asn Cys His Gly Asn His Ile  
 130 135 140  
 Glu Met Gln Ala Met Ala Glu Met Tyr Asn Arg Pro Val Glu Val Tyr  
 145 150 155 160  
 Gln Tyr Ser Thr Glu Pro Ile Asn Thr Phe His Gly Ile His Gln Asn  
 165 170 175  
 Glu Asp Glu Pro Ile Arg Val Ser Tyr His Arg Asn Ile His Tyr Asn  
 180 185 190  
 Ser Val Val Asn Pro Asn Lys Ala Thr Ile Gly Val Gly Leu Gly Leu  
 195 200 205  
 Pro Ser Phe Lys Pro Gly Phe Ala Glu Gln Ser Leu Met Lys Asn Ala  
 210 215 220  
 Ile Lys Thr Ser Glu Glu Ser Trp Ile Glu Gln Gln Met Leu Glu Asp  
 225 230 235 240  
 Lys Lys Arg Ala Thr Asp Trp Glu Ala Thr Asn Glu Ala Ile Glu Glu  
 245 250 255  
 Gln Val Ala Arg Glu Ser Tyr Leu Gln Trp Leu Arg Asp Gln Glu Lys  
 260 265 270  
 Gln Ala Arg Gln Val Arg Gly Pro Ser Gln Pro Arg Lys Ala Ser Ala  
 275 280 285  
 Thr Cys Ser Ser Ala Thr Ala Ala Ala Ser Ser Gly Leu Glu Glu Trp  
 290 295 300  
 Thr Ser Arg Ser Pro Arg Gln Arg Ser Ser Ala Ser Ser Pro Glu His  
 305 310 315 320  
 Pro Glu Leu His Ala Glu Leu Gly Met Lys Pro Pro Ser Pro Gly Thr  
 325 330 335  
 Val Leu Ala Leu Ala Lys Pro Pro Ser Pro Cys Ala Pro Gly Thr Ser  
 340 345 350  
 Ser Gln Phe Ser Ala Gly Ala Asp Arg Ala Thr Ser Pro Leu Val Ser  
 355 360 365  
 Leu Tyr Pro Ala Leu Glu Cys Arg Ala Leu Ile Gln Gln Met Ser Pro  
 370 375 380  
 Ser Ala Phe Gly Leu Asn Asp Trp Asp Asp Asp Glu Ile Leu Ala Ser

ctggaggagt ggactagccg gtccccgcgg cagcggagtt cagcctcgtc acctgagcac  
960  
cctgagctgc atgctgaatt gggcatgaag ccccttccc caggcactgt tttagctctt  
1020  
gccaaacctc cttcgccctg tgcgccaggt acaagcagtc agttctcggc aggggcccag  
1080  
cgggcaactt cccccctgt gtccctctac cctgctttgg agtgccgggc cctcattcag  
1140  
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gtgctggcag tgtcccaaca ggaataccta gacagtatga agaaaaacaa agtgcacaga  
1260  
gacccgcccc cagacaagag ttgatggaga cccagggatt ggacaccatc tccaacccc  
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1680  
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&lt;210&gt; 5742

&lt;400&gt; 5740

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 20 25 30  
 Leu Pro Val Cys Gly Gly Gln Lys Arg Lys Thr Thr Gln Gly Glu Cys  
 35 40 45  
 Leu Leu Pro Pro Ala Gly Lys Gln Leu Gly His His Leu Ser Glu Ser  
 50 55 60  
 Arg Cys Cys Ser Ser Trp Gln Gln Ser His Ser Glu Arg Ser Cys Val  
 65 70 75 80  
 His Cys Leu Ser Gly Arg Pro Cys Gln Ser Pro Ser Leu Pro Pro Pro  
 85 90 95  
 Tyr Leu Cys Arg Lys Pro Gly His His His Phe Lys Ala Leu Pro Ser  
 100 105 110  
 Phe Leu Gly Arg Ala Gln Pro Gln  
 115 120

&lt;210&gt; 5741

&lt;211&gt; 2444

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5741

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&lt;400&gt; 5738

```

Met Leu Pro Pro Trp Pro Ile Ser Ser His Gln Val Arg Met Ala Leu
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Gln His Leu Pro Leu Arg Leu Gln Leu Pro Ser Gln Val His Gln Glu
      20             25             30
Thr Thr Gly His His Trp Gln Trp Arg Gly Asp Met Glu His Gly Leu
      35             40             45
Gly Ser Arg Leu Leu Ala Pro Asp Val Gln Pro Gln Thr Pro Pro Val
      50             55             60
Met Gly Glu Val Trp Arg Pro Val Gln Leu Ser Gln Gly His Ala His
65             70             75             80
Leu Ser Leu Gly Ser Val Gly Lys Ala Tyr Pro Lys Ser His Ile Gln
      85             90             95
Gly Gly Xaa

```

&lt;210&gt; 5739

&lt;211&gt; 780

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5739

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780

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&lt;210&gt; 5740

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

```

      100      105      110
Glu Tyr Ile His Asn Phe Lys Leu Leu Gln Ala Ser Phe Lys Arg Met
      115      120      125
Asn Val Asp Lys Val Ile Pro Val Glu Lys Leu Val Lys Gly Arg Phe
      130      135      140
Gln Asp Asn Leu Asp Phe Ile Gln Trp Phe Lys Lys Phe Tyr Asp Ala
145      150      155      160
Asn Tyr Asp Gly Lys Glu Tyr Asp Pro Val Glu Ala Arg Gln Gly Gln
      165      170      175
Asp Ala Ile Pro Pro Asp Pro Gly Glu Gln Ile Phe Asn Leu Pro
      180      185      190
Lys Lys Ser His His Ala Asn Ser Pro Thr Ala Gly Ala Ala Lys Ser
      195      200      205
Ser Pro Ala Ala Lys Pro Gly Ser Thr Pro Ser Arg Pro Ser Ser Ala
      210      215      220
Lys Arg Ala Ser Ser Ser Gly Ser Ala Ser Lys Ser Asp Lys Asp Leu
225      230      235      240
Glu Thr Gln Val Ile Gln Leu Asn Glu Gln Val His Ser Leu Lys Leu
      245      250      255
Ala Leu Glu Gly Val Glu Lys Glu Arg Asp Phe Tyr Phe Gly Lys Leu
      260      265      270
Arg Glu Ile Glu Leu Leu Cys Gln Glu His Gly Gln Glu Asn Asp Asp
      275      280      285
Leu Val Gln Arg Leu Met Asp Ile Leu Tyr Ala Ser Glu Glu His Glu
      290      295      300
Gly His Thr Glu Glu Pro Glu Ala Glu Glu Gln Ala His Glu Gln Gln
305      310      315      320
Pro Pro Gln Gln Glu Glu Tyr
      325

```

&lt;210&gt; 5737

&lt;211&gt; 340

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5737

```

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caccgcagaa atgacaccgc acgccagcgc cccgcggccg
340

```

&lt;210&gt; 5738

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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 4200  
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 4241

&lt;210&gt; 5736

&lt;211&gt; 327

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5736

Met	Pro	Gly	Pro	Thr	Gln	Thr	Leu	Ser	Pro	Asn	Gly	Glu	Asn	Asn	Asn
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Asp	Ile	Ile	Gln	Asp	Asn	Asn	Gly	Thr	Ile	Ile	Pro	Phe	Arg	Lys	His
			20					25					30		
Thr	Val	Arg	Gly	Glu	Arg	Ser	Tyr	Ser	Trp	Gly	Met	Ala	Val	Asn	Val
		35					40					45			
Tyr	Ser	Thr	Ser	Ile	Thr	Gln	Glu	Thr	Met	Ser	Arg	His	Asp	Ile	Ile
		50				55					60				
Ala	Trp	Val	Asn	Asp	Ile	Val	Ser	Leu	Asn	Tyr	Thr	Lys	Val	Glu	Gln
65					70					75				80	
Leu	Cys	Ser	Gly	Ala	Ala	Tyr	Cys	Gln	Phe	Met	Asp	Met	Leu	Phe	Pro
				85					90					95	
Gly	Cys	Ile	Ser	Leu	Lys	Lys	Val	Lys	Phe	Gln	Ala	Lys	Leu	Glu	His

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&lt;210&gt; 5734

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5734

Xaa	His	Val	Val	Ile	Leu	Pro	Gly	Asp	Gly	Gly	Ser	Gly	Thr	Ala	Ala
1				5					10					15	
Ile	Ser	Phe	Thr	Gly	Ala	Leu	Lys	Ile	Pro	Gly	Val	Ile	Glu	Phe	Ser
			20					25					30		
Leu	Cys	Leu	Leu	Phe	Ala	Lys	Leu	Val	Ser	Tyr	Thr	Phe	Leu	Phe	Trp
		35					40					45			
Leu	Pro	Leu	Tyr	Ile	Thr	Asn	Val	Asp	His	Leu	Asp	Ala	Lys	Lys	Ala
	50					55				60					
Gly	Cys	Thr	Gly	Ser	Pro	Asp	Pro	Leu	Arg	His	Ser	Ser	His	Arg	Thr
65					70				75					80	
Ser	Lys														

&lt;210&gt; 5735

&lt;211&gt; 4241

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5735

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 780  
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<210> 5732

<211> 193

<212> PRT

<213> Homo sapiens

<400> 5732

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 Leu Thr Lys Ala Ala Thr Ser Gly Ile Leu Ser Ala Leu Gly Asn Phe  
 35 40 45  
 Leu Ala Gln Met Ile Glu Lys Lys Arg Lys Lys Glu Asn Ser Arg Ser  
 50 55 60  
 Leu Asp Val Gly Gly Pro Leu Arg Tyr Ala Val Tyr Gly Phe Phe Phe  
 65 70 75 80  
 Thr Gly Pro Leu Ser His Phe Phe Tyr Phe Phe Met Glu His Trp Ile  
 85 90 95  
 Pro Pro Glu Val Pro Leu Ala Gly Leu Arg Arg Leu Leu Leu Asp Arg  
 100 105 110  
 Leu Val Phe Ala Pro Ala Phe Leu Met Leu Phe Phe Leu Ile Met Asn  
 115 120 125  
 Phe Leu Glu Gly Lys Asp Ala Ser Ala Phe Ala Ala Lys Met Arg Gly  
 130 135 140  
 Gly Phe Trp Pro Ala Leu Arg Met Asn Trp Arg Val Trp Thr Pro Leu  
 145 150 155 160  
 Gln Phe Ile Asn Ile Asn Tyr Val Pro Leu Lys Phe Arg Val Leu Phe  
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 180 185 190  
 Lys

<210> 5733

<211> 950

<212> DNA

<213> Homo sapiens

<400> 5733

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<210> 5730

<211> 64

<212> PRT

<213> Homo sapiens

<400> 5730

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			20					25				30			
Ser	Ser	Ala	Gly	Thr	Ala	Ser	Ser	Ser	Pro	Ala	Ser	Gly	Thr	Cys	Gly
		35					40					45			
Gly	Ser	Ser	Ser	Ala	Gly	Gly	Ser	Ser	Ala	Arg	Phe	Cys	Thr	Lys	Phe
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<210> 5731

<211> 891

<212> DNA

<213> Homo sapiens

<400> 5731

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 120  
 atttgtcag cacttgggaa cttcctggcc cagatgattg agaagaagcg gaaaaaagaa  
 180  
 aactctagaa gtctggatgt cggtagggcct ctgagatatg ccgtttacgg gttcttcttc  
 240  
 acagggccgc tgagtcactt cttctacttc ttcatggaac attggatccc tctgaggtc  
 300  
 cccctggcag ggctcaggag gcttctcctg gaccgcctcg tctttgcacc ggccttcctc  
 360  
 atgttgttct tctcatcat gaactttctg gaggggaaag acgcctcagc cttcgccgcc  
 420  
 aagatgaggg ggggcttctg gccggcgtg aggatgaact ggcggtgtg gacgccacta  
 480  
 cagttcatca acatcaacta cgtccctctg aagttccggg tgctcttcgc caacctggca  
 540  
 gctctgttct ggtatgccta cctggcctcc ttggggaagt gacgaccgct gggagaacat  
 600

1	5	10	15
Trp Glu Gly Val Gly Ala Thr Met Ser Ser Tyr Gln Lys Glu Leu Glu			
	20	25	30
Lys Tyr Arg Asp Ile Asp Glu Asp Glu Ile Leu Arg Thr Leu Ser Pro			
	35	40	45
Glu Glu Leu Glu Gln Leu Asp Cys Glu Leu Gln Glu Met Asp Pro Glu			
	50	55	60
Asn Met Leu Leu Pro Ala Gly Leu Arg Gln Arg Asp Gln Thr Lys Lys			
65	70	75	80
Ser Pro Thr Gly Pro Leu Asp Arg Glu Ala Leu Leu Gln Tyr Leu Glu			
	85	90	95
Gln Gln Ala Leu Glu Val Lys Glu Arg Asp Asp Leu Val Pro Phe Thr			
	100	105	110
Gly Glu Lys Lys Gly Lys Pro Tyr Ile Gln Pro Lys Arg Glu Ile Pro			
	115	120	125
Ala Glu Glu Gln Ile Thr Leu Glu Pro Glu Leu Glu Ala Leu Ala			
	130	135	140
His Ala Thr Asp Ala Glu Met Cys Asp Ile Ala Ala Ile Leu Asp Met			
145	150	155	160
Tyr Thr Leu Met Ser Asn Lys Gln Tyr Tyr Asp Ala Leu Cys Ser Gly			
	165	170	175
Glu Ile Cys Asn Thr Glu Gly Ile Ser Ser Val Val Gln Pro Asp Lys			
	180	185	190
Tyr Lys Pro Val Pro Asp Glu Pro Pro Asn Pro Thr Asn Ile Glu Glu			
	195	200	205
Ile Leu Lys Arg Val Arg Ser Asn Asp Lys Glu Leu Glu Glu Val Asn			
	210	215	220
Leu Asn Asn Ile Gln Asp Ile Pro Ile Pro Met Leu Ser Glu Leu Cys			
225	230	235	240
Glu Ala Met Lys Ala Asn Thr Tyr Val Arg Ser Phe Ser Leu Val Ala			
	245	250	255
Thr Arg Ser Gly Asp Pro Ile Ala Asn Ala Val Ala Asp Met Leu Arg			
	260	265	270
Glu Asn Arg Ser Leu Gln Ser Leu Asn Ile Glu Ser Asn Phe Ile Ser			
	275	280	285
Ser Thr Gly Leu Met Ala Val Leu Lys Ala Val Arg Glu Asn Ala Thr			
	290	295	300
Leu Thr Glu Leu Arg Val Asp Asn Gln Arg Gln Trp Pro Gly Asp Ala			
305	310	315	320
Val Glu Met Glu Met Ala Thr Val Leu Glu Gln Cys Pro Ser Ile Val			
	325	330	335
Arg Phe Gly Tyr His Phe Thr Gln Gln Gly Pro Arg Ala Arg Ala Ala			
	340	345	350
Gln Ala Met Thr Arg Asn Asn Glu Leu Arg Arg Gln Gln Lys Lys Arg			
	355	360	365

&lt;210&gt; 5729

&lt;211&gt; 381

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5729

naaatttatt actacgcatc acagcagcaa cgggcgggaa gggcggcgcc agactcattt

60

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5727

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60  
ggggccacca tgtcatcata tcagaaggaa ctggagaaat acagagacat agatgaagat  
120  
gagatcctaa ggaccttgag ccccgaggag ctagagcagc tggactgcga actacaggag  
180  
atggatcctg agaacatgct cctgccagct ggactaagac aacgtgacca gacaaagaag  
240  
agcccaacgg ggccactgga ccgagaggcc cttttgcagt acttgagca acaggcacta  
300  
gaagtcaaag agcgtgatga cttggtgccc ttcacaggcg agaagaagg gaaaccctat  
360  
attcagccca agagggaaat cccagcagag gagcagatca ccctggagcc tgagctggag  
420  
gaggcactgg cacatgccac agatgctgaa atgtgtgaca ttgcagcaat tctggacatg  
480  
tacacactga tgagtaacaa gcaatactat gatgccctct gcagtggaga aatctgcaac  
540  
actgaaggca ttagcagtgt ggtacagcct gacaagtata agccagtgcc ggatgaaccc  
600  
ccaaatccca caaacattga ggagatacta aagagggtcc gaagcaatga caaggagctg  
660  
gaggaggtga acttgaataa tatacaggac atcccaatac ccatgctaag tgagctgtgt  
720  
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780  
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840  
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900  
gaaaatgcc cactcactga gctccgtgta gacaatcagc gccagtggcc tggatgatgca  
960  
gtggagatgg agatggccac cgtgctagag cagtgtccct ctattgtccg ctttggctac  
1020  
cactttacac agcaggggcc acgagctcgg gcagcccagg ccatgaccg aaacaatgaa  
1080  
ctacgtcgcc agcaaaagaa gagataacac tgcatttccc ttaccaact agcgtggga  
1140  
gcactggaca cttaaatect catctgtcct cctttcctgt aaataaaagc ctttctatcc  
1200  
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa  
1237

&lt;210&gt; 5728

&lt;211&gt; 368

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5728

Xaa Arg Arg Glu Val Thr Thr Arg Thr Gly Ser Val Ser Thr Thr Gln

tcattggttct ccttctctcc ctgaggacac caaattggat gagagcaagt ttgagagaag  
 1020  
 aatgaatcaa ctgctatcct tccctcacc cctcagccca ggagggaaaag ggcattttct  
 1080  
 ttttcatctt tgaaaggcat tgtgggtctg tctttaaagt gtttacaaaa aaattatata  
 1140  
 aaaaaaagtc tagtgtcgac  
 1160

<210> 5726

<211> 273

<212> PRT

<213> Homo sapiens

<400> 5726

Ala	Phe	Phe	Pro	Phe	Leu	Pro	Pro	Arg	Leu	Leu	Phe	Asp	Ser	Leu	Pro	1	5	10	15
Leu	Tyr	Ala	Arg	Pro	Ala	Leu	Pro	Leu	Leu	Leu	Arg	Ser	Gly	Gly	Gly	20	25	30	
Ser	Arg	Pro	Pro	Gly	Ser	Arg	Pro	Thr	Ala	His	Gly	Arg	Ala	Trp	Gly	35	40	45	
Ala	Ser	Arg	Ala	Arg	Arg	Pro	Ala	Pro	Gly	Gly	Pro	Phe	Pro	Gly	Val	50	55	60	
Ser	Thr	Asp	Asp	Ser	Ala	Val	Pro	Pro	Pro	Gly	Gly	Ala	Pro	His	Phe	65	70	75	80
Gly	His	Tyr	Arg	Thr	Gly	Gly	Gly	Ala	Met	Gly	Leu	Arg	Ser	Ala	Ser	85	90	95	
Val	Ser	Ser	Val	Ala	Gly	Met	Gly	Met	Asp	Pro	Ser	Thr	Ala	Gly	Gly	100	105	110	
Val	Pro	Phe	Gly	Leu	Tyr	Thr	Pro	Ala	Ser	Arg	Gly	Thr	Gly	Asp	Ser	115	120	125	
Glu	Arg	Ala	Pro	Gly	Gly	Gly	Gly	Ser	Ala	Ser	Asp	Ser	Thr	Tyr	Ala	130	135	140	
His	Gly	Asn	Gly	Tyr	Gln	Glu	Thr	Gly	Gly	Gly	His	His	Arg	Asp	Gly	145	150	155	160
Met	Leu	Tyr	Leu	Gly	Ser	Arg	Ala	Ser	Leu	Ala	Asp	Ala	Leu	Pro	Leu	165	170	175	
His	Ile	Ala	Pro	Arg	Trp	Phe	Ser	Ser	His	Ser	Gly	Phe	Lys	Cys	Pro	180	185	190	
Ile	Cys	Ser	Lys	Ser	Val	Ala	Ser	Asp	Glu	Met	Glu	Met	His	Phe	Ile	195	200	205	
Met	Cys	Leu	Ser	Lys	Pro	Arg	Leu	Ser	Tyr	Asn	Asp	Asp	Val	Leu	Thr	210	215	220	
Lys	Asp	Ala	Gly	Glu	Cys	Val	Ile	Cys	Leu	Glu	Glu	Leu	Leu	Gln	Gly	225	230	235	240
Asp	Thr	Ile	Ala	Arg	Leu	Pro	Cys	Leu	Cys	Ile	Tyr	His	Lys	Ser	Cys	245	250	255	
Ile	Asp	Ser	Trp	Phe	Glu	Val	Asn	Arg	Ser	Cys	Pro	Glu	His	Pro	Ala	260	265	270	

Asp

<210> 5727

<211> 1237

1	5	10	15
Leu Lys Ala Arg Lys Asn Val Glu Ser Phe Leu Glu Ala Cys Arg Lys			
20	25	30	
Met Gly Val Pro Glu Val Trp Gly Leu Leu Ser Lys Glu Trp Trp His			
35	40	45	
Ala Gly Leu Ser Gly Ala Met Trp His Gly Trp Trp Ala Ser Ile Cys			
50	55	60	
Ser Gly Cys Leu Leu Ser Asp Glu Gly Thr Gly Cys Pro Cys Leu Pro			
65	70	75	80
Gln His Ala Pro Cys Pro Ala Cys Pro Leu Pro Cys Met Ser Pro Val			
85	90	95	
Leu His Ile Pro Cys Pro Ala Gly Pro Ile Leu Ser Cys Met Ser Pro			
100	105	110	
Val Leu His Met Pro Cys Pro Ala Leu Leu Leu His Ala			
115	120	125	

&lt;210&gt; 5725

&lt;211&gt; 1160

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5725

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120
accgcgcacg ggcgagcatg gggggcaagc agagcacggc gaccgctcc cgggggcccc
180
ttcccggggg tctccaccga tgacagcgcc gtgccgccgc cgggaggggc gcccatttc
240
gggactacc ggacgggagg cggggccatg gggctgcgca gcgcatcggc cagctcggtg
300
gcaggcatgg gcatggaccc cagcacggcc gggggggtgc cttttggcct ctacaccccc
360
gcctcccggg gcaccggcga ctccgagagg gcgcccggcg gcggagggtc tgcgtccgac
420
tccacctatg cccatggcaa tggttaccag gagacggcg gcggtacca tagagacggg
480
atgctgtacc tgggtcccg agcctcgtg gcggatgtc tacctctgca catcgacccc
540
aggtgggtca gctcgcatag tggtttcaag tgccccattt gctccaagtc tgtggcttct
600
gacgagatgg aaatgcactt tataatgtgt ttgagcaaac ctgcctctc ctacaacgat
660
gatgtgctga ctaaagacgc gggtagtgt gtgatctgcc tggaggagct gctgcagggg
720
gacacgatag ccaggctgcc ctgcctgtgc atctatcaca aaagctgcat agactcgtgg
780
tttgaagtga acagatcttg tccggaacac cctgcggact gacctgcggg cttgcttgct
840
gactcctctc aaaggacag agcggccctg ctccaggag gaggtcacc ggaccctggg
900
gcagagctga gcttgggaca ccagcgggaa cagggcaccc cttctgcact gacttccaga
960

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ttggtgaaca ccagctttaa ggaagatggc ccagactata cagaacacct gccatgccct  
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 tgagactgca gactttcatc tacaacagtg gttaatgtaa aagagtagtt atgggtgtaa  
 300  
 ctggtgaatt tcttcttccc tttgtatttc taattgacct ttcctccctg taaagaaaag  
 360  
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<210> 5722

<211> 80

<212> PRT

<213> Homo sapiens

<400> 5722

Leu	Asp	Ile	Ala	Asn	Gln	Thr	Gly	Arg	Ser	Ile	Arg	Ile	Pro	Pro	Ser
1				5				10					15		
Glu	Arg	Lys	Ala	Leu	Met	Leu	Ala	Met	Gly	Tyr	His	Glu	Lys	Gly	Arg
			20				25					30			
Ala	Phe	Leu	Lys	Arg	Lys	Glu	Tyr	Gly	Ile	Ala	Leu	Pro	Cys	Leu	Leu
			35			40					45				
Asp	Ala	Asp	Lys	Tyr	Phe	Trp	Trp	Ala	Leu	Leu	Tyr	Leu	Val	Asn	Thr
	50				55				60						
Ser	Phe	Lys	Glu	Asp	Gly	Pro	Asp	Tyr	Thr	Glu	His	Leu	Pro	Cys	Pro
65					70				75					80	

<210> 5723

<211> 376

<212> DNA

<213> Homo sapiens

<400> 5723

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 aagaatgtgg agagttttct agaagcctgt cgaaaaatgg ggggtgcctga ggtatggggg  
 120  
 ctgctttcta aagagtgggtg gcatgccgga ctacgcggag ccatgtggca tggatgggtg  
 180  
 gcttcattt gcagcggatg tctgctctca gatgaaggca caggctgccc ctgcctgccc  
 240  
 cagcatgccc cctgcctgc atgccccctg ccctgcatgt cacctgtcct acacatcccc  
 300  
 tgccctgcag gcccattctt gtctgcatg tcacctgtcc tgcacatgcc ctgccctgca  
 360  
 ctctcctgc acgcgt  
 376

<210> 5724

<211> 125

<212> PRT

<213> Homo sapiens

<400> 5724

Xaa Thr Thr Phe Ser Ser Phe His Pro Pro Gln Pro Lys Leu Ser Ala

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      130              135              140
Phe His Tyr Ala Val Asp Asn Leu Gly Ala Asp Ala Ile Ala Thr Gly
145              150              155              160
His Tyr Ala Arg Thr Ser Leu Glu Asp Glu Glu Val Phe Glu Gln Lys
      165              170              175
His Val Lys Lys Pro Glu Gly Leu Phe Arg Asn Arg Phe Glu Val Arg
      180              185              190
Asn Ala Val Lys Leu Leu Gln Ala Ala Asp Ser Phe Lys Asp Gln Thr
      195              200              205
Phe Phe Leu Ser Gln Val Ser Gln Asp Ala Leu Arg Arg Thr Ile Phe
      210              215              220
Pro Leu Gly Gly Leu Thr Lys Glu Phe Val Lys Lys Ile Ala Ala Glu
225              230              235              240
Asn Arg Leu His His Val Leu Gln Lys Lys Glu Ser Met Gly Met Cys
      245              250              255
Phe Ile Gly Lys Arg Asn Phe Glu His Phe Leu Leu Gln Tyr Leu Gln
      260              265              270
Pro Arg Pro Gly His Phe Ile Ser Ile Glu Asp Asn Lys Val Leu Gly
      275              280              285
Thr His Lys Gly Trp Phe Leu Tyr Thr Leu Gly Gln Arg Ala Asn Ile
      290              295              300
Gly Gly Leu Arg Glu Pro Trp Tyr Val Val Glu Lys Asp Ser Val Lys
305              310              315              320
Gly Asp Val Phe Val Ala Pro Arg Thr Asp His Pro Ala Leu Tyr Arg
      325              330              335
Asp Leu Leu Arg Thr Ser Arg Val His Trp Ile Ala Glu Glu Pro Pro
      340              345              350
Ala Ala Leu Val Arg Asp Lys Met Met Glu Cys His Phe Arg Phe Arg
      355              360              365
His Gln Met Ala Leu Val Pro Cys Val Leu Thr Leu Asn Gln Asp Gly
      370              375              380
Thr Val Trp Val Thr Ala Val Gln Ala Val Arg Ala Leu Ala Thr Gly
385              390              395              400
Gln Phe Ala Val Phe Tyr Lys Gly Asp Glu Cys Leu Gly Ser Gly Lys
      405              410              415
Ile Leu Arg Leu Gly Pro Ser Ala Tyr Thr Leu Gln Lys Gly Gln Arg
      420              425              430
Arg Ala Gly Met Ala Thr Glu Ser Pro Ser Asp Ser Pro Glu Asp Gly
      435              440              445
Pro Gly Leu Ser Pro Leu Leu
450              455

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&lt;210&gt; 5721

&lt;211&gt; 400

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5721

ttagacatag ctaaccagac aggcagatca atcagaattc ccccatcaga aagaaaagcc  
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cttatggttag ctatgggata tcatgagaag ggcagagctt tcctgaaaag aaaagaatat  
120

ggaatagcct tgccatgtct gttggacgct gacaaatatt tctgggtgggc gcttttgtac  
180

cactttattt ccatagaaga caataagggt ctgggaacac ataaagggtg gttcctgtat  
 1440  
 accttggggc agagagcaaa cataggtggc ctgagagagc cctggtacgt ggtggagaag  
 1500  
 gacagcgtca aggggtgacgt gtttgtggcc ccccgacag accaccagc cctgtacagg  
 1560  
 gacctgctga ggaccagccg cgtgcactgg attgctggagg agcctcccg agcactggtc  
 1620  
 cgggacaaga tgatggagtg ccacttccga ttccgccacc agatggcact agtgcctgt  
 1680  
 gtgctgacct tcaatcaaga tggcaccgtg tgggtgacag ctgtgcaggc tgtgctgccc  
 1740  
 cttgccacag gacagtttgc tgtgttctac aagggggacg agtgcctggg cagcgggaag  
 1800  
 atcctgctgc tggggccgctc tgcctacacg ctccagaagg gccagcgag agctgggatg  
 1860  
 gccactgaga gccccagtga cagcccagaa gatggtccag gcctgagtcc cttgctctga  
 1920  
 cagagatgga tctgctagaa ggaacctgga gagcaggacc catggctggg cggctggtga  
 1980  
 gcagtccagg tgcccaaggg ccagcttgct gctgcccaga gcagaggaag cgggctggc  
 2040  
 tgagggtccg aaaagcctgc agggggcccg cgagccccag gaagagcctc agctccaggc  
 2100  
 tggggctctg gctgctggag catctgctgg ctggtggggg ggcccagatt ccccttcacc  
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 gccccaggg agggtttccc acctcagagt acaccgaggg gacctgcaga gggggctgtc  
 2220  
 gggacagcgt ggaataaaca ttatttcaag gaaaaaaaa aaaaaaa  
 2267

&lt;210&gt; 5720

&lt;211&gt; 455

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5720

Val	Pro	Val	Leu	His	Lys	His	Pro	Cys	His	Leu	Val	Thr	Ser	Pro	Pro
1				5					10					15	
Gln	Gln	Gln	Arg	Gly	His	Gly	Ala	Val	His	Ala	Ala	Gly	Gln	Gly	Ala
			20					25					30		
His	Asp	Val	Pro	Gln	Gly	Leu	His	Pro	Pro	Val	Ala	Pro	Ser	Gly	Gly
		35					40					45			
Val	Asp	Ser	Ala	Val	Ala	Ala	Leu	Leu	Leu	Arg	Arg	Arg	Gly	Tyr	Gln
	50					55					60				
Val	Thr	Gly	Val	Phe	Met	Lys	Asn	Trp	Asp	Ser	Leu	Asp	Glu	His	Gly
65					70				75					80	
Val	Cys	Thr	Ala	Asp	Lys	Asp	Cys	Glu	Asp	Ala	Tyr	Arg	Val	Cys	Gln
			85					90					95		
Ile	Leu	Asp	Ile	Pro	Phe	His	Gln	Val	Ser	Tyr	Val	Lys	Glu	Tyr	Trp
			100				105					110			
Asn	Asp	Val	Phe	Ser	Asp	Phe	Leu	Asn	Glu	Tyr	Glu	Lys	Gly	Arg	Thr
	115						120					125			
Pro	Asn	Pro	Asp	Ile	Val	Cys	Asn	Lys	His	Ile	Lys	Phe	Ser	Cys	Phe

225

&lt;210&gt; 5719

&lt;211&gt; 2267

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5719

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60  
ccgcctttga tgtaggtcc tggagaaggg gaagtgggtc gggaccacac ggtccagctg  
120  
ctccgtgcc tgcagtcggg aaagggaac aggcactaat caaaggcaac tgctcactcg  
180  
tacctctttc ttctgaagca catgatgaag tctattctca gcagcgattt tctttacaaa  
240  
ctctttcggt aatcccccca gaggaagat ggttctctc agggcatcct gggaaacctg  
300  
gcatttctaa cttcaaaccg atttctgaaa agcccttcgg gcttcttaac gtgcttctgc  
360  
tcaaagactt cttcatcttc cagggaagtt cttgcatagt gacctgtggc aatggcatct  
420  
gcccctgaac acatcattcc aatactcctt tacgtaggac acttgatgga aagggatgtc  
480  
taagatctgg caaactctgt aagcatcttc acagtctttg tcggcagtag agaccccatg  
540  
ttcatccagt gaggccagt tcttcataaa caccctgtc acctggtaac ctctccgct  
600  
cagcagcagc gcggccacgg cgctgtccac gccgccggac agggcgacac cgacgtgccg  
660  
caaggcctgc atccgccagt cgcctcgtcc ggcggcgtgg acagcgccgt ggccgcgtg  
720  
ctgctgaggc ggagagggtt ccagggtgac ggggtgttta tgaagaactg ggactcactg  
780  
gatgaacatg ggggtctgtac tgccgacaaa gactgtgaag atgcttacag agtttgccag  
840  
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900  
agtgaacttt tgaatgagta tgaaaaagga aggactccca atcctgacat agtttgcaac  
960  
aagcacatca aatttagttg cttttttcat tatgctgtgg ataactcttg ggcagatgcc  
1020  
attgccacag gtcactatgc aagaacttcc ctggaagatg aagaagtctt tgagcagaag  
1080  
cacgttaaga agcccgaagg gcttttcaga aatcggtttg aagttagaaa tgcggtaaaa  
1140  
ctcctccagg cagctgacag ctttaaagac cagaccttct ttctcagcca ggtttcccag  
1200  
gatgccctga ggagaaccat cttccctctg gggggattaa cgaaagagtt tgtaaagaaa  
1260  
atcgctgctg agaatagact tcatcatgtg cttcagaaga aagagagcat gggcatgtgt  
1320  
ttcatcggga agaggaattt tgaacatttc cttcttcagt atctgcagcc tcgacctggg  
1380

ctgatctcca tectgggtgg cctctgcctc tgctccgcct gctgctgcgg ctctgacgag  
 960  
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 1020  
 acctcggacc aagaaggcga cagcagcttt ggcaaatacg gcagaaacgc ctacgtgtag  
 1080  
 cagctctggc ccgtggggcc cgctgtcttc ccactgcccc aaggagaggg gacctggccg  
 1140  
 gggcccatc ccctatagta acctcagggg ccggccacgc cccgctcccg tagccccgcc  
 1200  
 ccggccacgg ccccggtgtc tgcactctca tggccctcc agccaagaa ctgctcttgg  
 1260  
 gaagtgcac atctccctc tgaggctgga tccctcatc tctgacctg ggttctgggc  
 1320  
 tgtgaagggg acggtgtccc cgcacgtttg tattgtgtat aaatacattc attaataaat  
 1380  
 gcatattgtg accgttaaaa aaaaaaaaaa aaaaaaaaaa  
 1419

&lt;210&gt; 5718

&lt;211&gt; 228

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5718

Met	Ser	Met	Ala	Val	Glu	Thr	Phe	Gly	Phe	Phe	Met	Ala	Thr	Val	Gly
1				5				10						15	
Leu	Leu	Met	Leu	Gly	Val	Thr	Leu	Pro	Asn	Ser	Tyr	Trp	Arg	Val	Ser
			20					25					30		
Thr	Val	His	Gly	Asn	Val	Ile	Thr	Thr	Asn	Thr	Ile	Phe	Glu	Asn	Leu
		35					40					45			
Trp	Phe	Ser	Cys	Ala	Thr	Asp	Ser	Leu	Gly	Val	Tyr	Asn	Cys	Trp	Glu
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			85					90					95		
Ile	Ala	Gly	Leu	Arg	Cys	Thr	Asn	Ile	Gly	Gly	Leu	Glu	Leu	Ser	Arg
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Lys	Ala	Lys	Leu	Ala	Ala	Thr	Ala	Gly	Ala	Leu	His	Ile	Leu	Ala	Gly
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	130					135					140				
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			165					170					175		
Leu	Cys	Leu	Cys	Ser	Ala	Cys	Cys	Cys	Gly	Ser	Asp	Glu	Asp	Pro	Ala
			180					185				190			
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Asn	Ala	Tyr	Val												

20										25					30				
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Thr	Ser	Lys	Tyr	Cys	Pro	Met	Cys	Asn	Ile	Lys	Ile	His	Glu	Thr	Gln				
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Pro	Leu	Leu	Asn	Leu	Lys	Leu	Asp	Arg	Val	Met	Gln	Asp	Ile	Val	Tyr				
65	70					75					80								
Lys	Leu	Val	Pro	Gly	Leu	Gln	Asp	Ser	Glu	Glu	Lys	Arg	Ile	Arg	Glu				
85							90					95							
Phe	Tyr	Gln	Ser	Arg	Gly	Leu	Asp	Arg	Val	Thr	Gln	Pro	Thr	Gly	Glu				
100							105					110							
Glu	Pro	Ala	Leu	Ser	Asn	Leu	Gly	Leu	Pro	Phe	Ser	Ser	Phe	Asp	His				
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Ser	Lys	Ala	His	Tyr	Tyr	Arg	Tyr	Asp	Glu	Gln	Leu	Asn	Leu	Cys	Leu				
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Glu Arg Leu Arg																			
145																			

<210> 5717

<211> 1419

<212> DNA

<213> Homo sapiens

<400> 5717

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240	gacctgccag	gaagcagaga	gacccacaga	gcaggaggga	ggcagaaagt	ggagacggac
300	ctgagcccga	ggaagaggca	ggcagaggct	gaggctgatt	ccaccccagc	ctgcctggac
360	aaccctcctt	agccgcagcc	ccttcagtt	ccctaggggt	tctgccctc	ccctctctcg
420	gggcaccagc	cccccagggt	cctgcatccc	accatgtcga	tggctgtgga	aacctttggc
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840	tgcgggatgg	tggccatctc	ctggtaacgc	ttcaacatca	cccgggactt	cttcgacccc
900	ttgtaccccg	gaaccaagta	cgagctgggc	cccgcctct	acctgggggtg	gagcgccctca

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 1200  
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 1260  
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 1320  
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 1458

&lt;210&gt; 5716

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5716

Leu Gln Glu Glu Val Arg Val Lys Ile Lys Asp Leu Asn Glu His Ile  
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<210> 5715
<211> 1458
<212> DNA
<213> Homo sapiens
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 1080  
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 1140  
 ccagaatctg attcaaatac tcagggtgat tggacttacg acccaaatac acctcgatac  
 1200  
 tgcatttgta atcagggtatc ttatgggtgag atgggtgggat gtgataacca agattgccct  
 1260  
 atagaatggt tccattatgg ctgcgttgga ttgacagagg caccaaaagg caaatggtag  
 1320  
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 1380  
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 1440  
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 1500  
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 1620  
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 1680  
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 1740  
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 1860  
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 1920  
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 1980  
 ggttaaaagt attttg  
 1996

&lt;210&gt; 5714

&lt;211&gt; 408

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5714

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Glu	Met	Asp	Leu	Gln	Val	Gln	Asn	Ala	Met	Asp	Gln	Leu	Glu	Gln	Arg
			20					25					30		
Val	Ser	Glu	Phe	Phe	Met	Asn	Ala	Lys	Lys	Asn	Lys	Pro	Glu	Trp	Arg
			35				40					45			
Glu	Glu	Gln	Met	Ala	Ser	Ile	Lys	Lys	Asp	Tyr	Tyr	Lys	Ala	Leu	Glu
			50				55					60			
Asp	Ala	Asp	Glu	Lys	Val	Gln	Leu	Ala	Asn	Gln	Ile	Tyr	Asp	Leu	Val
65					70					75				80	
Asp	Arg	His	Leu	Arg	Lys	Leu	Asp	Gln	Glu	Leu	Ala	Lys	Phe	Lys	Met

Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly  
 50 55 60  
 Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe  
 65 70 75 80  
 Val Asp Ile Val Asp Ala Lys Leu Lys Ile Pro Val Ser Gly Ser Lys  
 85 90 95  
 Ser Glu Gly Leu Leu Tyr Val His Ser Ser Arg Gly Gly Pro Phe Gln  
 100 105 110  
 Arg Trp His Leu Asp Glu Val Phe Leu Glu Leu Lys Asp Gly Gln Gln  
 115 120 125  
 Ile Pro Val Phe Lys Leu Ser Gly Glu Asn Gly Asp Glu Val Lys Lys  
 130 135 140  
 Glu  
 145

&lt;210&gt; 5713

&lt;211&gt; 1996

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5713

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 120  
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 180  
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 240  
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 300  
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 360  
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 420  
 aagtttataaa tggagctgga agctgataat gctggaatta cagaaatatt agagaggcga  
 480  
 tctttggaat tagacactcc ttcacagcca gtgaacaatc accatgctca ttcacatact  
 540  
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 660  
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 720  
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 780  
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&lt;400&gt; 5711

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 720  
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 780  
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 1020  
 aagaaactcc tattataaat ttaagataat gtaatgtatt tgaaagtgtc ttgtataaaa  
 1080  
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 1140  
 1142

&lt;210&gt; 5712

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5712

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Arg	Ile	Leu	Phe	His	Gly	Val	Phe	Tyr	Ala	Gly	Gly	Phe	Ala	Ile	Val
		20						25				30			
Tyr	Tyr	Leu	Ile	Gln	Lys	Phe	His	Ser	Arg	Ala	Leu	Tyr	Tyr	Lys	Leu
		35					40					45			

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<210> 5711
<211> 1142
<212> DNA
<213> Homo sapiens
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 780  
 tacaagcctg ttcttaccac gtccactggc taccagccgg catataccac ctctaccacg  
 840  
 gtgctcattc agactacccg tgtgcccaag caggtggcag taccgcgcac agacaccact  
 900  
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 960  
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 1020  
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 1080  
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 1140  
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 1200  
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 1260  
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 1320  
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 1440  
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 1620  
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 ttatt  
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<210> 5710

<211> 441

<212> PRT

<213> Homo sapiens

<400> 5710

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His	Phe	Pro	Glu	Ile	Arg	Pro	Gly	Ser	Phe	His	Gly	Leu	Ser	Ser	Leu
		20					25					30			
Lys	Lys	Leu	Trp	Val	Met	Asn	Ser	Gln	Val	Ser	Leu	Ile	Glu	Arg	Asn
		35				40					45				
Ala	Phe	Asp	Gly	Leu	Ala	Ser	Leu	Val	Glu	Leu	Asn	Leu	Ala	His	Asn

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<210> 5709
<211> 1805
<212> DNA
<213> Homo sapiens
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120
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240
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360
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420
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600
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660

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 6900  
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<210> 5708

<211> 506

<212> PRT

<213> Homo sapiens

<400> 5708

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			20					25					30		
Glu	Val	Thr	Glu	Glu	Asn	Val	Gln	Val	Leu	Leu	Pro	Ala	Ala	Ser	Leu
			35				40					45			
Leu	Gln	Leu	Met	Asp	Val	Arg	Gln	Asn	Cys	Cys	Asp	Phe	Leu	Gln	Ser
			50				55				60				
Gln	Leu	His	Pro	Thr	Asn	Cys	Leu	Gly	Ile	Arg	Ala	Phe	Ala	Asp	Val
65					70					75				80	
His	Thr	Cys	Thr	Asp	Leu	Leu	Gln	Gln	Ala	Asn	Ala	Tyr	Ala	Glu	Gln
				85					90					95	
His	Phe	Pro	Glu	Val	Met	Leu	Gly	Glu	Glu	Phe	Leu	Ser	Leu	Ser	Leu
			100					105					110		
Asp	Gln	Val	Cys	Ser	Leu	Ile	Ser	Ser	Asp	Lys	Leu	Thr	Val	Ser	Ser
			115					120					125		
Glu	Glu	Lys	Val	Phe	Glu	Ala	Val	Ile	Ser	Trp	Ile	Asn	Tyr	Glu	Lys
			130				135					140			
Glu	Thr	Arg	Leu	Glu	His	Met	Ala	Lys	Leu	Met	Glu	His	Val	Arg	Leu
145					150					155				160	
Pro	Leu	Leu	Pro	Arg	Asp	Tyr	Leu	Val	Gln	Thr	Val	Glu	Glu	Glu	Ala
				165					170					175	
Leu	Ile	Lys	Asn	Asn	Thr	Cys	Lys	Asp	Phe	Leu	Ile	Glu	Ala	Met	
			180					185				190			
Lys	Tyr	His	Leu	Leu	Pro	Leu	Asp	Gln	Arg	Leu	Leu	Ile	Lys	Asn	Pro
			195				200					205			
Arg	Thr	Lys	Pro	Arg	Thr	Pro	Val	Ser	Leu	Pro	Lys	Val	Met	Ile	Val
			210				215					220			
Val	Gly	Gly	Gln	Ala	Pro	Lys	Ala	Ile	Arg	Ser	Val	Glu	Cys	Tyr	Asp
225					230					235				240	
Phe	Glu	Glu	Asp	Arg	Trp	Asp	Gln	Ile	Ala	Glu	Leu	Pro	Ser	Arg	Arg
				245					250					255	
Cys	Arg	Ala	Gly	Val	Val	Phe	Met	Ala	Gly	His	Val	Tyr	Ala	Val	Gly
			260					265				270			
Gly	Phe	Asn	Gly	Ser	Leu	Arg	Val	Arg	Thr	Val	Asp	Val	Tyr	Asp	Gly
			275				280					285			
Val	Lys	Asp	Gln	Trp	Thr	Ser	Ile	Ala	Ser	Met	Gln	Glu	Arg	Arg	Ser
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 Lys Pro Leu Thr Phe Ala Asp Cys Ile Ser Asp Glu Leu Pro Leu Gly  
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Val Glu Ala Ile Ser Leu Ser Ile Leu Val Gly Ser Ser Val Asp Tyr
              115              120              125
Cys Val His Leu Val Glu Gly Tyr Leu Leu Ala Gly Glu Asn Leu Pro
              130              135              140
Pro His Gln Ala Glu Asp Ala Arg Thr Gln Arg Gln Trp Arg Thr Leu
145              150              155              160
Glu Ala Val Arg His Val Gly Val Ala Ile Val Ser Ser Ala Leu Thr
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Thr Val Ile Ala Thr Val Pro Leu Phe Phe Cys Ile Ile Ala Pro Phe
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Ala Lys Phe Gly Lys Ile Val Ala Leu Asn Thr Gly Val Ser Ile Leu
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Tyr Thr Leu Thr Val Ser Thr Ala Leu Leu Gly Ile Met Ala Pro Ser
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Ser Phe Thr Arg Thr Arg Thr Ser Phe Leu Lys Ala Leu Gly Ala Val
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Leu Leu Ala Gly Ala Leu Gly Leu Gly Ala Cys Leu Val Leu Leu Gln
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&lt;210&gt; 5705

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5705

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&lt;210&gt; 5704

&lt;211&gt; 269

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5704

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&lt;210&gt; 5703

&lt;211&gt; 1496

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5703

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 1885

&lt;210&gt; 5702

&lt;211&gt; 348

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5702

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 Leu Leu Tyr Glu Asp Ile Gly Thr Ser Arg Val Arg Tyr Trp Asp Leu  
 35 40 45  
 Leu Leu Leu Ile Pro Asn Val Leu Phe Leu Ile Phe Leu Leu Trp Lys  
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Lys Ile Leu Arg Asn Ala Arg Lys Leu Pro Glu Lys Thr Gln Thr Phe
      100              105              110
Tyr Lys Glu Leu Asn Arg Leu Arg Lys Ala Ala Leu Ala Phe Gly Phe
      115              120              125
Leu Asp Leu Leu Lys Gly Val Ala Asp Met Leu Glu Arg Glu Cys Thr
      130              135              140
Leu Leu Pro Glu Thr Ala His Pro Asp Ala Ala Phe Gln Leu Thr His
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Ala Tyr Asp Gln Asn Ile Thr Pro Leu His Thr Asp Phe Ser Gly Ser
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Ser Thr Glu Arg Ile
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&lt;210&gt; 5701

&lt;211&gt; 1885

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5701

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&lt;210&gt; 5700

&lt;211&gt; 197

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5700

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			20					25					30		
Glu	Pro	Gly	Pro	Glu	Pro	Leu	Pro	Trp	Leu	Gly	Lys	Met	Ala	Gln	Leu

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 Gln Leu Val Gly Leu Ala Leu Cys Leu Met Leu Val Gln Val Ile Ile  
                     165                      170                      175  
 Ala Val Glu Trp Leu Val Leu Thr Val Leu Arg Asp Thr Arg Pro Ala  
                     180                      185                      190  
 Cys Ala Tyr Glu Pro Met Asp Phe Val Met Ala Leu Ile Tyr Asp Met  
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 Val Leu Leu Val Val Thr Leu Gly Leu Ala Leu Phe Thr Leu Cys Gly  
                     210                      215                      220  
 Lys Phe Lys Arg Trp Lys Leu Asn Gly Ala Phe Leu Leu Ile Thr Ala  
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 Phe Leu Ser Val Leu Ile Trp Val Ala Trp Met Thr Met Tyr Leu Phe  
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 Gly Asn Val Lys Leu Gln Gln Gly Asp Ala Trp Asn Asp Pro Thr Leu  
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 Ala Ile Thr Leu Ala Ala Ser Gly Trp Val Phe Val Ile Phe His Ala  
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 Ile Pro Glu Ile His Cys Thr Leu Leu Pro Ala Leu Gln Glu Asn Thr  
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 Pro Asn Tyr Phe Asp Thr Ser Gln Pro Arg Met Arg Glu Thr Ala Phe  
 305                      310                      315                      320  
 Glu Glu Asp Val Gln Leu Pro Arg Ala Tyr Met Glu Asn Lys Ala Phe  
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 Ser Met Asp Glu His Asn Ala Ala Leu Arg Thr Ala Gly Phe Pro Asn  
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 Gly Ser Leu Gly Lys Arg Pro Ser Gly Ser Leu Gly Lys Arg Pro Ser  
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 Ala Pro Phe Arg Ser Asn Val Tyr Gln Pro Thr Glu Met Ala Val Val  
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 Leu Asn Gly Gly Thr Ile Pro Thr Ala Pro Pro Ser His Thr Gly Arg  
 385                      390                      395                      400  
 His Leu Trp

&lt;210&gt; 5699

&lt;211&gt; 1565

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5699

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&lt;210&gt; 5698

&lt;211&gt; 403

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5698

Met	Phe	Val	Ala	Ser	Glu	Arg	Lys	Met	Arg	Ala	His	Gln	Val	Leu	Thr
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Thr	Ser	Arg	Gly	Cys	Gly	Leu	Asp	Leu	Leu	Pro	Gln	Tyr	Val	Ser	Leu
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Cys	Asp	Leu	Asp	Ala	Ile	Trp	Gly	Ile	Val	Val	Glu	Ala	Val	Ala	Gly
		50				55					60				
Ala	Gly	Ala	Leu	Ile	Thr	Leu	Leu	Leu	Met	Leu	Ile	Leu	Leu	Val	Arg
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Leu	Pro	Phe	Ile	Lys	Glu	Lys	Glu	Lys	Lys	Ser	Pro	Val	Gly	Leu	His
				85					90					95	
Phe	Leu	Phe	Leu	Gly	Thr	Leu	Gly	Leu	Phe	Gly	Leu	Thr	Phe	Ala	
			100				105					110			
Phe	Ile	Ile	Gln	Glu	Asp	Glu	Thr	Ile	Cys	Ser	Val	Arg	Arg	Phe	Leu
			115				120					125			
Trp	Gly	Val	Leu	Phe	Ala	Leu	Cys	Phe	Ser	Cys	Leu	Leu	Ser	Gln	Ala

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210		215		220
Glu Gln Val Leu Tyr His Gly Thr Thr Ala Pro Ala Val Pro Asp Ile				
225		230		235
Cys Ala His Gly Phe Asn Arg Ser Phe Cys Gly Arg Asn Ala Thr Val				
	245		250	255
Tyr Gly Lys Gly Val Tyr Phe Ala Arg Arg Ala Ser Leu Ser Val Gln				
	260		265	270
Asp Arg Tyr Ser Pro Pro Asn Ala Asp Gly His Lys Ala Val Phe Val				
	275		280	285
Ala Arg Val Leu Thr Gly Asp Tyr Gly Gln Gly Arg Arg Gly Leu Arg				
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Ala Pro Pro Leu Arg Gly Pro Gly His Val Leu Leu Arg Tyr Asp Ser				
305		310		315
Ala Val Asp Cys Ile Cys Gln Pro Ser Ile Phe Val Ile Phe His Asp				
	325		330	335
Thr Gln Ala Leu Pro Thr His Leu Ile Thr Cys Glu His Val Pro Arg				
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Ala Ser Pro Asp Asp Pro Ser Gly Leu Pro Gly Arg Ser Pro Asp Thr				
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&lt;210&gt; 5697

&lt;211&gt; 3362

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5697

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<211> 368

<212> PRT

<213> Homo sapiens

<400> 5696

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Gln	Pro	Pro	Leu	Glu	Ala	Glu	Glu	Pro	Pro	Asp	Arg	Gly	Thr	Asp	Gly
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Lys	Ala	Gln	Leu	Val	Val	His	Ser	Ala	Phe	Glu	Gln	Asp	Val	Glu	Glu
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Leu	Asp	Arg	Ala	Leu	Arg	Ala	Ala	Leu	Glu	Val	His	Val	Gln	Glu	Glu
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Thr	Val	Gly	Pro	Trp	Arg	Arg	Thr	Leu	Pro	Ala	Glu	Leu	Arg	Ala	Arg
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Leu	Glu	Arg	Cys	His	Gly	Val	Ser	Val	Ala	Leu	Arg	Gly	Asp	Cys	Thr
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Ile	Leu	Arg	Gly	Phe	Gly	Ala	His	Pro	Ala	Arg	Ala	Ala	Arg	His	Leu
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Val	Ala	Leu	Leu	Ala	Gly	Pro	Trp	Asp	Gln	Ser	Leu	Ala	Phe	Pro	Leu
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Glu	Leu	Tyr	Arg	Glu	Arg	Leu	Leu	Gln	Arg	Cys	Glu	Arg	Arg	Pro	Val

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 1227

&lt;210&gt; 5692

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5692

Lys Arg Lys Asn Asn Cys His Gly Asn His Ile Glu Met Gln Ala Met  
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 Ala Glu Met Tyr Asn Arg Pro Val Glu Val Tyr Gln Tyr Ser Thr Glu  
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 Pro Ile Asn Thr Phe His Gly Ile His Gln Asn Glu Asp Glu Pro Ile  
 35 40 45  
 Arg Val Ser Tyr His Arg Asn Ile His Tyr Asn Ser Val Val Asn Pro  
 50 55 60  
 Asn Lys Ala Thr Ile Gly Val Gly Leu Gly Cys His His Ser Asn Gln  
 65 70 75 80  
 Gly Leu Gln Ser Ser Leu  
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&lt;210&gt; 5693

&lt;211&gt; 389

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5693

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 180  
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 300

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 1800  
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 1897

<210> 5690

<211> 54

<212> PRT

<213> Homo sapiens

<400> 5690

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Val	Gly	Gln	Cys	Val	Val	Val	Phe	Ser	Gln	Ala	Pro	Ser	Gly	Arg	Ala
		20					25					30			
Pro	Leu	Ser	Pro	Ser	Leu	Asn	Ser	Arg	Pro	Ser	Pro	Ile	Ser	Ala	Thr
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<210> 5691

<211> 1227

<212> DNA

<213> Homo sapiens

<400> 5691

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 120  
 catcaaaacg aggacgaacc cattcgtgtt agctaccatc ggaatatcca ctataattca  
 180  
 gtgggtgaatc ctaacaaggc caccattggt gtggggctgg gctgccatca ttcaaaccag  
 240  
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 300  
 aacagcagat gctagaagac aagaaacggg ccacagactg ggaggccaca aatgaagcca  
 360  
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 420  
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 480  
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 660  
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 720

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120  
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180  
tctcgcccat cacctatcag tgccactncc tccagctctc gttcctgaaa cccgagagta  
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1320  
cagaagccaa aactctttaa ttcccaaccg aagtcactcc aggctgggat caaatctcca  
1380  
ttaagaaaaa aaattatata taaatatata tatatatatt atatagccaa ctctgttgac  
1440  
aaaaaaaggg agagatttcc atcctgggtc agataaagtt gttgctgtgt tttaacaggg  
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gctgggctgc ctttttctac cttgctggta actagaccaa gaagttagag aatagactaa  
1560  
catcagtaac ttcccaaaag aaactgaaga gcccctgta aatctttatg tggccttctt  
1620  
ggagttaaaa aatgaaaggg catatgtaag ttgcaaaggt ggagggtttt agactctcat  
1680

35 40 45  
 Ile Glu Glu Arg Leu Leu Met Tyr Ser Phe Val Asn Asp Lys Tyr Val  
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 Pro Ser Gln Arg Pro  
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<210> 5687  
 <211> 328  
 <212> DNA  
 <213> Homo sapiens

<400> 5687  
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 120  
 ggtggatccg aaactctggc tgacgggaag agctgtgaga atgtggatga atgtgtgggc  
 180  
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<210> 5688  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 5688  
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 20 25 30  
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 35 40 45  
 Gly Lys Ser Cys Glu Asn Val Asp Glu Cys Val Gly Leu Gln Pro Val  
 50 55 60  
 Cys Pro Gln Gly Thr Thr Cys Ile Asn Thr Gly Gly Ser Phe Gln Cys  
 65 70 75 80  
 Val Ser Pro Glu Cys Pro Glu Gly Ser Gly Asn Val Ser Tyr Val Lys  
 85 90 95  
 Thr Ser Pro Phe Gln Cys Glu Arg Asn Pro Cys Pro Met  
 100 105

<210> 5689  
 <211> 1897  
 <212> DNA  
 <213> Homo sapiens

<400> 5689  
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Gln Gln Asn Lys Leu Phe Tyr Pro Glu His His Ser Tyr Ala Leu Glu
      20             25             30
His Cys Ile Ser Leu Leu Leu Thr Arg Lys Gln Gln Cys Asn Tyr Ser
      35             40             45
His Val Asn Arg Gly Cys Ala Ser His Val Val Pro Ser Glu Ser Ile
      50             55             60
Gly Trp Ile Val Cys Val Pro Trp Leu Met Leu Thr His Gln Tyr Arg
      65             70             75             80
Ser Ala Leu Arg Val Cys Arg Asp Gly Gln Cys Leu Thr Ala Glu Ala
      85             90             95
Ser Leu Gly Gln Arg Met Asp
      100

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&lt;210&gt; 5685

&lt;211&gt; 604

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5685

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120
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180
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240
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atcc
604

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&lt;210&gt; 5686

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5686

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Pro Cys Ser Arg Val Gly Gly Lys Arg Val Val Cys Tyr Asp Asp Arg
  1             5             10             15
Phe Ile Val Lys Leu Ala Tyr Glu Ser Asp Gly Ile Val Val Ser Asn
      20             25             30
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&lt;213&gt; Homo sapiens

&lt;400&gt; 5682

Met Glu Ala Glu Thr Lys Thr Leu Pro Leu Glu Asn Ala Ser Ile Leu  
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 Ser Glu Gly Ser Leu Gln Glu Gly His Arg Leu Trp Ile Gly Asn Leu  
 20 25 30  
 Asp Pro Lys Ile Thr Glu Tyr His Leu Leu Lys Leu Leu Gln Lys Phe  
 35 40 45  
 Gly Lys Val Lys Gln Phe Asp Phe Leu Phe His Lys Ser Gly Ala Leu  
 50 55 60  
 Glu Gly Gln Pro Arg Gly Tyr Cys Phe Val Asn Phe Glu Thr Lys Gln  
 65 70 75 80  
 Glu Ala Glu Gln Ala Ile Gln Cys Leu Asn Gly Lys Leu Ala Leu Ser  
 85 90 95  
 Lys Lys Leu Val Val Arg Trp Ala His Ala Gln Val Lys Arg Tyr Asp  
 100 105 110  
 His Asn Lys Asn Asp Lys Ile Leu Pro Ile Ser Leu Glu Pro Ser Ser  
 115 120 125  
 Ser Thr Glu Pro Thr Gln Ser Asn Leu Ser Val Thr Ala Lys Ile Lys  
 130 135 140  
 Ala Ile Glu Ala Lys Leu Lys Met Met Ala Glu Asn Pro Asp Ala Glu  
 145 150 155 160  
 Tyr Pro Ala Ala Pro Val Tyr Ser Tyr Phe Lys Pro Pro Asp Lys Lys  
 165 170 175  
 Arg Thr Thr Pro Tyr Ser Arg Thr Ala Trp Lys Ser Arg Arg  
 180 185 190

&lt;210&gt; 5683

&lt;211&gt; 328

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5683

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 180  
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 240  
 gggtagaaaa gtttattttg ctggtgggag gcagggtttg ttaataaagc tttgaaatac  
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 328

&lt;210&gt; 5684

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5684

Met Lys Phe Val Tyr Phe Lys Ala Leu Leu Thr Lys Pro Ala Ser His

&lt;400&gt; 5681

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120  
tagacattga tggaagcaga aacccaaaact cttcccctgg agaatgcac catcctttca  
180  
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240  
gaataccacc tcctcaagct cctccagaag tttggcaagg taaagcagtt tgacttcctc  
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1380  
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1402

&lt;210&gt; 5682

&lt;211&gt; 190

&lt;212&gt; PRT

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 420  
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 480  
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 665

<210> 5680  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 5680  
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 20 25 30  
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 35 40 45  
 Ser Thr Pro Gln Gln Pro Ser Pro Glu Ser Thr Pro Gln His Ser Ser  
 50 55 60  
 Leu Glu Thr Thr Ser Arg Gln Pro Ala Phe Gln Ala Leu Pro Ala Pro  
 65 70 75 80  
 Glu Ile Arg Arg Ser Ser Cys Cys Leu Leu Ser Pro Asp Ala Asn Val  
 85 90 95  
 Lys Ala Ala Pro Gln Ser Arg Lys Ala Glu Asn Leu Gln Glu Asn Pro  
 100 105 110  
 Pro Val Ile Val Thr Arg Val Leu Gln Ala Leu Gly Thr Val Ala Val  
 115 120 125  
 Ala Leu Gly Ala Leu Gly Ala Ala Tyr Tyr Ile Thr Glu Ser Leu  
 130 135 140

<210> 5681  
 <211> 1402  
 <212> DNA  
 <213> Homo sapiens

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5677

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477

&lt;210&gt; 5678

&lt;211&gt; 151

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5678

Met	Ala	Ser	Leu	Arg	Leu	Cys	Ser	Gly	His	Pro	Ser	Ser	Ser	Ser	Ser
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Ala	Ser	Thr	Ser	Leu	Ile	Ser	Ala	Leu	Val	Val	Phe	Ser	Ser	Trp	Cys
			20					25					30		
Met	Glu	Trp	Thr	Ser	Arg	Tyr	Phe	His	Met	Gln	Ile	Arg	Gly	Arg	Gly
		35				40					45				
Ser	Gly	Gly	Cys	Gly	Lys	Lys	Ala	Asn	Trp	Gly	Arg	Gln	Gln	Gly	Phe
	50				55					60					
Ser	Leu	Glu	Gln	Thr	Ser	Ala	Ala	Cys	Ala	Leu	Leu	Gln	Asp	Leu	His
	65			70						75				80	
Lys	Ala	Cys	Ile	Ala	His	Gly	His	Lys	Gln	Leu	Leu	Ser	Glu	Val	Asn
			85					90					95		
Glu	Trp	Ile	Pro	Glu	Arg	Ala	Ser	Leu	Leu	His	Leu	Ala	Phe	Pro	Thr
			100				105					110			
Ser	Asn	Pro	Leu	Gly	Gln	Arg	Gly	Gly	Val	Leu	Pro	Leu	Leu	His	Gln
	115					120					125				
Cys	Pro	Phe	Leu	Pro	Trp	Ser	Gln	Ala	Ala	Ser	Phe	Gln	His	Arg	Pro
	130				135						140				
Leu	Gln	Arg	Gly	Thr	Ala	Ala									
145					150										

&lt;210&gt; 5679

&lt;211&gt; 665

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5679

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 840  
 agacaggtta acaggataaa aagcagacaa tgtctctcca tgtcggagac cgccgtggcc  
 900  
 agagcctggc ctggggctgc tgggcctgcc ctggctatct ctctggggct ggccaggggt  
 960  
 ggccttgggc tcactcccag gactcgtgt cctcagcgag tgccccactg ctgagcggga  
 1020  
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 1074

&lt;210&gt; 5676

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5676

Glu	Val	Thr	Val	Leu	Cys	Thr	Gly	Leu	Ser	Leu	Ser	Ile	Gly	Met	Thr
1				5				10					15		
Ala	Thr	Ser	Gln	Gly	Cys	Arg	Ala	Gly	Gly	Arg	Cys	Gly	Trp	Ala	Cys
			20				25					30			
Ala	Cys	Phe	Arg	Arg	Gln	Gln	Asn	Arg	Thr	Gln	Pro	Ala	Val	Thr	Pro
		35				40				45					
His	Ser	Arg	Ser	Arg	Arg	Thr	Ala	Ser	Arg	Met	Ser	Leu	Gly	Glu	Gln
	50				55					60					
Gly	Ser	Thr	Thr	Gly	Leu	Thr	Leu	Gly	His	Arg	Ala	Pro	Ala	Pro	Trp
65				70				75						80	
Gly	Met	Ser	Trp	His	Asn	His	Arg	Arg	Gln	Val	Asn	Arg	Ile	Lys	Ser
			85				90					95			
Arg	Gln	Cys	Leu	Ser	Met	Ser	Glu	Thr	Ala	Val	Ala	Arg	Ala	Trp	Pro
		100				105					110				
Arg	Ala	Ala	Gly	Pro	Ala	Leu	Ala	Ile	Ser	Pro	Gly	Leu	Ala	Arg	Gly
	115				120						125				
Gly	Leu	Gly	Leu	Thr	Pro	Arg	Thr	Arg	Cys	Pro	Gln	Arg	Val	Pro	His
	130				135					140					

Cys  
 145

&lt;210&gt; 5677

&lt;211&gt; 477

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 960  
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 1080  
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 1140  
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 1200  
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 1279

&lt;210&gt; 5674

&lt;211&gt; 81

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5674

Leu	His	Ser	Gln	Ile	Tyr	Ser	Thr	Ala	Lys	Lys	Ala	Ser	Leu	Ser	Met
1				5					10				15		
Lys	Gly	Ser	Arg	Asp	Lys	Thr	Arg	Ala	Ala	Ser	Ser	Arg	Pro	Val	Pro
			20					25					30		
Ser	Val	Leu	Gly	Val	Pro	Pro	Trp	Ser	Thr	Leu	Leu	Gln	His	Pro	Gln
		35					40					45			
Asn	Met	Trp	Pro	Gly	Pro	Ala	Gln	Gln	Gly	Gln	Pro	Ser	Gly	Arg	
	50					55				60					
Gln	Ala	Trp	Cys	Thr	Pro	Gly	Glu	Ala	Pro	Gly	Ala	Glu	Ala	Ala	Pro
65					70					75				80	
Gln															

&lt;210&gt; 5675

&lt;211&gt; 1074

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5675

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 120  
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 180  
 cgggtgaaca tggcaccgag gttggggcca cagcaatgtg tgggacgggtg ggggtgggctg  
 240  
 gggcccttgg ctccaagcat tagttctcca agctctggtc cgttctctta cctccttcaa  
 300  
 ggggcaccag ggctacaagg tggtagttga gtattggggc ccgactcctg gggcactgga  
 360

Glu Ala Ile Ser Gly Ile His Asp Gln Glu Asp Gly Glu Gln Cys Lys  
                     85                    90                    95  
 Ser Val Phe His Trp Asp Met Lys Ser Lys Asp Lys Glu Gly Ala Pro  
                     100                    105                    110  
 Asn Arg Gln Pro Leu Ala Asn Glu Arg Ala Tyr Trp Thr Gly Tyr Gly  
                     115                    120                    125  
 Glu Gly Asn Ala Trp Cys Pro Gly Ala Leu Pro Asp Pro Glu Ile Val  
                     130                    135                    140  
 Arg Met Val Glu Ala Arg Lys Ser Leu Gly Glu Glu Tyr Thr Glu Asp  
                     145                    150                    155                    160  
 Tyr Glu Gln Pro Arg Gly Lys Gly Ser Phe Pro Ala Met Ile Thr Pro  
                     165                    170                    175  
 Ala Tyr Gln Arg Ala Lys Lys Ala Asn Gln Leu Ala Ser Gln Val Glu  
                     180                    185                    190  
 Tyr Lys Arg Gly His Asp Glu Arg Ile Ser Arg Phe Ser Thr Val Ala  
                     195                    200                    205  
 Asp Thr Pro Glu Leu Leu Arg Ser Lys Ala Trp Gly  
                     210                    215                    220

&lt;210&gt; 5673

&lt;211&gt; 1279

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5673

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 120  
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 180  
 ttagctgggc tctaacttca ctcaaaatt tatagtacag ctaagaaggc cagtctgtcc  
 240  
 atgaaagga gccagacaa gacgagggcg gcctcttcca ggctgtgcc aagtgtcctt  
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 ggggtccgc catggtccac acttctgcag catccgcaga acatgtggcc gggctcctgcc  
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 420  
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 480  
 gcctctgcag ccctggcact gccgcccagc cctccatctc agcgggatgt gcagggtgag  
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 660  
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 720  
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 780  
 cctgggtctc tgccgggtggc tcacggtgca gggtacggcc catcagccca gatgctgcat  
 840

565 570 575  
 His Trp Ile Lys Arg Gly Val Ala Leu Ile Cys Ala Leu Asp Tyr  
 580 585 590  
 <210> 5671  
 <211> 818  
 <212> DNA  
 <213> Homo sapiens  
 <400> 5671  
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 360  
 cacactccat taaatctaaa tgtgaggaca tttccagagg ccatcagtggt gatccatgac  
 420  
 caagaagatg gtgaacagtg taaatcagtt tttcattggg acatgaaatc caaggataag  
 480  
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 780  
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 818

<210> 5672  
 <211> 220  
 <212> PRT  
 <213> Homo sapiens

<400> 5672  
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 Glu Lys Ile Ser Cys Ile Asp Gln Ile Trp His Lys Ala Cys Phe His  
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 Cys Glu Val Cys Lys Met Met Leu Ser Val Asn Asn Phe Val Ser His  
 35 40 45  
 Gln Lys Lys Pro Tyr Cys His Ala His Asn Pro Lys Asn Asn Thr Phe  
 50 55 60  
 Thr Ser Val Tyr His Thr Pro Leu Asn Leu Asn Val Arg Thr Phe Pro  
 65 70 75 80

4842

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 1080  
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 1140  
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 1200  
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 1320  
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 1380  
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 1440  
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 1500  
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 1560  
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 1620  
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 1680  
 accaactatg tcattgctgt ggagatcccc acccatcagc cccagcgaca ctggataaag  
 1740  
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 1800  
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 1842

<210> 5670

<211> 591

<212> PRT

<213> Homo sapiens

<400> 5670

Phe	Val	Leu	Ser	Pro	Gly	Thr	Asp	Pro	Ala	Ala	Asp	Leu	Tyr	Lys	Phe
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Ala	Glu	Glu	Met	Lys	Phe	Ser	Lys	Lys	Leu	Ser	Ala	Ile	Ser	Leu	Gly
			20					25					30		
Gln	Gly	Gln	Gly	Pro	Arg	Ala	Glu	Ala	Met	Met	Arg	Ser	Ser	Ile	Glu
			35					40					45		
Arg	Gly	Lys	Trp	Val	Phe	Phe	Gln	Asn	Cys	His	Leu	Ala	Pro	Ser	Trp
			50					55				60			
Met	Pro	Ala	Leu	Glu	Arg	Leu	Ile	Glu	His	Ile	Asn	Pro	Asp	Lys	Val
65					70					75				80	
His	Arg	Asp	Phe	Arg	Leu	Trp	Leu	Thr	Ser	Leu	Pro	Ser	Asn	Lys	Phe
			85					90					95		
Pro	Val	Ser	Ile	Leu	Gln	Asn	Gly	Ser	Lys	Met	Thr	Ile	Glu	Pro	Pro
			100					105					110		
Arg	Gly	Val	Arg	Ala	Asn	Leu	Leu	Lys	Ser	Tyr	Ser	Ser	Leu	Gly	Glu
			115				120						125		
Asp	Phe	Leu	Asn	Ser	Cys	His	Lys	Val	Met	Glu	Phe	Lys	Ser	Leu	Leu

	35		40		45	
Lys	Glu	Ile	Arg	Gln	Val	Val
	50			55		60
Ala	Met	Met	Phe	Arg	Gln	Arg
65				70		75
Asn	Met	Leu	Asp	Val	Gln	Gly
				85		90
Ser	Ser	Leu	Leu	Asn	Ala	Lys
				100		105
Arg	Lys	Val	Lys	Gln	Tyr	Leu
				115		120
Glu	Lys	Phe	Gln	Met	Met	Ser
				130		135
Cys	Glu	Tyr	Lys	Phe	Ser	Phe
145				150		Met

&lt;210&gt; 5669

&lt;211&gt; 1842

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5669

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aagttctcca aaaagctctc tgccatctcc ctggggccagg ggcagggccc tcgggcagaa
120
gccatgatgc gcagctccat agagaggggc aaatgggtct tcttcagaa ctgccacctg
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240
cacagggact tccgcctctg gctcaccagc ctgcccagca acaagttccc agtgtccatc
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360
aagtcctata gtagccttgg tgaagacttc ctcaactcct gccacaaggt gatggagtcc
420
aagtctctgc tgctgtctct gtgcttgctc catgggaacg ccctggagcg ccgtaagttt
480
gggcccctgg gcttcaacat cccctatgag ttcacggatg gagatctgag catctgcatc
540
agccagctca agatgttcct ggacgaatat gatgacatcc cctacaaggt cctcaagtac
600
acggcagggg agatcaatta cggggggcgt gtcactgatg actgggacgg gcgctgcatc
660
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720
gcctcgggca tctaccacca gatcccgctt acctacgacc tccacggcta cctctcctac
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840
atcacctttg ccagaaacga gacgttcgcc ctctgggca ccatcatcca gctgcaaccc
900
aaatcatctt ctgcaggcag ccaggggcgg gaggagatag tggaggacgt caccctaaac
960

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35 40 45  
 Ala Val Pro Asp Ile Cys Ala His Gly Phe Asn Arg Ser Phe Cys Gly  
 50 55 60  
 Arg Asn Ala Thr Val Tyr Gly Lys Gly Val Tyr Phe Ala Arg Arg  
 65 70 75

<210> 5667  
 <211> 858  
 <212> DNA  
 <213> Homo sapiens

<400> 5667  
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 120  
 tttgagaagt taagaatgat ttccaaggaa atccgccaag ttgttcgaat gacttctgct  
 180  
 aacatggacc cagctatgat gtttcgacag aggtcactga gtcaaggaag cacaattca  
 240  
 aacatgctgg atgttcaggg aggtgctcac aaaaaaggg cacgccgcag ctctctgctt  
 300  
 aatgccaaga agctatatga ggatgcccaa atggcaagga aggtgaagca gtatctttcc  
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 540  
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 600  
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 660  
 taattctttt aaaaactgga tcattataga ggaggctttc tgtttgagaa catttttata  
 720  
 ttcaccccta aagagtaaac ataagtggaa tttttacctc tttttatttc atggataata  
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<210> 5668  
 <211> 152  
 <212> PRT  
 <213> Homo sapiens

<400> 5668  
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 Phe Pro Val Val Lys Lys Asp Met Thr Phe Leu His Glu Gly Asn Asp  
 20 25 30  
 Ser Lys Val Asp Gly Leu Val Asn Phe Glu Lys Leu Arg Met Ile Ser

```

65          70          75          80
Pro Glu Leu Ile Lys Glu Ser Asn Ala Asn Pro Ile Phe Met Arg Lys
          85          90          95
Asp Thr Lys Met Ser Phe Gln Trp Arg Ile Arg Asn Leu Pro Tyr Pro
          100          105          110
Lys Asp Val Tyr Ser Val Ser Val Asp Gln Lys Glu Arg Cys Ile Ile
          115          120          125
Val Arg Thr Thr Asn Lys Lys Tyr Tyr Lys Lys Phe Ser Ile Pro Asp
          130          135          140
Leu Asp Arg His Gln Leu Pro Leu Asp Asp Ala Leu Leu Ser Phe Ala
          145          150          155          160
His Ala Asn Cys Thr Leu Ile Ile Ser Tyr Gln Lys Pro Lys Glu Val
          165          170          175
Val Val Ala Glu Ser Glu Leu Gln Lys Glu Leu Lys Lys Val Lys Thr
          180          185          190
Ala His Ser Asn Asp Gly Asp Cys Lys Thr Gln
          195          200

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&lt;210&gt; 5665

&lt;211&gt; 531

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5665

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gtcaagtcct gtaggcagca tagggccctg getcagcttt tctctgcaga ggcctcgctt
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240
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300
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360
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420
cacggcacga cggcaccggc agtgctgac atctgcgccc acggcttcaa ccgcagcttc
480
tgcgcccgca acgccacggt ctacgggaag ggcgtgtatt tcgccaggcg c
531

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&lt;210&gt; 5666

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5666

```

Ser Trp Pro Gly Pro Ser Pro Gln Val Glu Arg Val Ser His Pro Leu
1          5          10          15
Leu Gln Gln Gln Tyr Glu Leu Tyr Arg Glu Arg Leu Leu Gln Arg Cys
20          25          30
Glu Arg Arg Pro Val Glu Gln Val Leu Tyr His Gly Thr Thr Ala Pro

```

145

&lt;210&gt; 5663

&lt;211&gt; 857

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5663

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120
agacaggagg ctgccgtggt caagaagggc caagccttga agtctcacgg caccctctgt
180
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240
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360
atccagaggt agctggtgtc tatctagatc aggaatggag aacttcttgt agtacttctt
420
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480
cttaggatag gggaggtttc gaatccgcca ctggaaactc atcttggtgt ccttgcgcac
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660
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720
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780
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840
gccagccgc tgccatg
857

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&lt;210&gt; 5664

&lt;211&gt; 203

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5664

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Met Ala Val Thr Gly Trp Leu Glu Ser Leu Arg Thr Ala Gln Lys Thr
  1           5           10           15
Ala Leu Leu Gln Asp Gly Arg Arg Lys Val His Tyr Leu Phe Pro Asp
  20           25           30
Gly Lys Glu Met Ala Glu Glu Tyr Asp Glu Lys Thr Ser Glu Leu Leu
  35           40           45
Val Arg Lys Trp Arg Val Lys Ser Ala Leu Gly Ala Met Gly Gln Trp
  50           55           60
Gln Leu Glu Val Gly Asp Pro Ala Pro Leu Gly Ala Gly Asn Leu Gly

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245

250

&lt;210&gt; 5661

&lt;211&gt; 578

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5661

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 120  
 ataaccagtg gcacggcaag gacccagcag gaagcaccag ccactggccc cgacctcccg  
 180  
 caccaggac ctgacgggca cttagacaca cacagtggcc tgagctccaa ctccagcatg  
 240  
 accacgcggg agcttcagca gtactggcag aaccagaaat gccgctggaa gcacgtcaaa  
 300  
 ctgctctttg agatcgcttc agctcgcatc gaggagagaa aagtctctaa gtttgtgatg  
 360  
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 420  
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 578

&lt;210&gt; 5662

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5662

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Gln	Tyr	Trp	Gln	Asn	Gln	Lys	Cys	Arg	Trp	Lys	His	Val	Lys	Leu	Leu
			85					90					95		
Phe	Glu	Ile	Ala	Ser	Ala	Arg	Ile	Glu	Glu	Arg	Lys	Val	Ser	Lys	Phe
			100					105				110			
Val	Met	Gly	Lys	Ser	Arg	Pro	Gly	Glu	Met	Thr	Tyr	Pro	Gly	Ser	Arg
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<211> 253

<212> PRT

<213> Homo sapiens

<400> 5660

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Glu	Pro	Arg	Pro	Arg	Ala	Lys	Arg	Arg	Pro	Ile	Val	Lys	Thr	Gly	Lys
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Phe	Lys	Lys	Met	Phe	Gly	Trp	Gly	Asp	Phe	His	Ser	Asn	Ile	Lys	Thr
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Val	Lys	Leu	Asn	Leu	Leu	Ile	Thr	Gly	Lys	Ile	Val	Asp	His	Gly	Asn
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Gly	Thr	Phe	Ser	Val	Tyr	Phe	Arg	His	Asn	Ser	Thr	Gly	Gln	Gly	Asn
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		195		200		205
Val Asp Arg Val Gly Leu Ile Thr Arg Ser Glu Arg Tyr Val Cys Ala						
		210		215		220
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		225		230		235
Pro Ser Gly Ala Val Val Thr Leu Glu Cys Val Glu Lys Leu Ile Arg						
		245		250		255
Lys Asp Met Val Asp Pro Val Thr Gly Asp Lys Leu Thr Asp Arg Asp						
		260		265		270
Ile Ile Val Leu Gln Arg Gly Gly Thr Gly Phe Ala Gly Ser Gly Val						
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&lt;210&gt; 5659

&lt;211&gt; 1263

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5659

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&lt;210&gt; 5658

&lt;211&gt; 301

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5658

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His	Glu	Lys	Lys	Lys	Asp	Thr	Ala	Ala	Ser	Gly	Tyr	Gly	Thr	Gln	Asn
			20					25					30		
Ile	Arg	Leu	Ser	Arg	Asp	Ala	Val	Lys	Asp	Phe	Asp	Cys	Cys	Cys	Leu
		35					40					45			
Ser	Leu	Gln	Pro	Cys	His	Asp	Pro	Val	Val	Thr	Pro	Asp	Gly	Tyr	Leu
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Tyr	Glu	Arg	Glu	Ala	Ile	Leu	Glu	Tyr	Ile	Leu	His	Gln	Lys	Lys	Glu
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			85					90					95		
Glu	Glu	Gln	Lys	Glu	Leu	Gln	Arg	Ala	Ala	Ser	Gln	Asp	His	Val	Arg
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&lt;210&gt; 5657

&lt;211&gt; 1020

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5657

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4831

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 Thr Asn Pro Gln Gly Asp Tyr Asp Thr Ser Thr Gly Lys Phe Thr Cys  
 145 150 155 160  
 Lys Val Pro Gly Leu Tyr Tyr Phe Val Tyr His Ala Ser His Thr Ala  
 165 170 175  
 Asn Leu Cys Val Leu Leu Tyr Arg Ser Gly Val Lys Val Val Thr Phe  
 180 185 190  
 Cys Gly His Thr Ser Lys Thr Asn Gln Val Asn Ser Gly Gly Val Leu  
 195 200 205  
 Leu Arg Leu Gln Val Gly Glu Glu Val Trp Leu Ala Val Asn Asp Tyr  
 210 215 220  
 Tyr Asp Met Val Gly Ile Gln Gly Ser Asp Ser Val Phe Ser Gly Phe  
 225 230 235 240  
 Leu Leu Phe Pro Asp  
 245

<210> 5655  
 <211> 3810  
 <212> DNA  
 <213> Homo sapiens

<400> 5655  
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Val	Lys	Phe	Ala	Val	Arg	Glu
145				150		155
Ala	Glu	Pro				160

&lt;210&gt; 5653

&lt;211&gt; 1439

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5653

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300
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480
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720
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1140
gcttctctgca tggaccacc ttactggcca gtctgcatcc ttgcctagac cattctcccc
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1260

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100

<210> 5651  
 <211> 615  
 <212> DNA  
 <213> Homo sapiens

<400> 5651  
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 120  
 ctcgccatga agagccgctt tagcaccatt gacctccgcg ccgtactcgc ggagctgaat  
 180  
 gctagcttgc taggaatgag agtaaacaat gtttatgatg tggataataa gacatacctt  
 240  
 attcgtcttc aaaaaccgga ctttaaagct acacttttac ttgaatctgg catacaaatt  
 300  
 catacaacag aatttgagtg gcctaagaat atgatgccgt ctagttttgc catgaagtgc  
 360  
 cgaaaacatt tgaagagtgc gagattagtc agtgcaaac agcttggtgt ggatagaatt  
 420  
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 480  
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 615

<210> 5652  
 <211> 163  
 <212> PRT  
 <213> Homo sapiens

<400> 5652  
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 Leu Asn Ala Ser Leu Leu Gly Met Arg Val Asn Asn Val Tyr Asp Val  
 20 25 30  
 Asp Asn Lys Thr Tyr Leu Ile Arg Leu Gln Lys Pro Asp Phe Lys Ala  
 35 40 45  
 Thr Leu Leu Leu Glu Ser Gly Ile Gln Ile His Thr Thr Glu Phe Glu  
 50 55 60  
 Trp Pro Lys Asn Met Met Pro Ser Ser Phe Ala Met Lys Cys Arg Lys  
 65 70 75 80  
 His Leu Lys Ser Arg Arg Leu Val Ser Ala Lys Gln Leu Gly Val Asp  
 85 90 95  
 Arg Ile Val Asp Phe Gln Phe Gly Ser Asp Glu Ala Ala Tyr His Leu  
 100 105 110  
 Ile Ile Glu Leu Tyr Asp Arg Gly Asn Ile Val Leu Thr Asp Tyr Glu  
 115 120 125  
 Tyr Val Ile Leu Asn Ile Leu Arg Phe Arg Thr Asp Glu Ala Asp Asp

<210> 5648  
 <211> 50  
 <212> PRT  
 <213> Homo sapiens

<400> 5648  
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 1 5 10 15  
 Phe Phe Pro Gly Arg Pro Lys Gly Glu Pro Gly Ile Pro Ala Ile Pro  
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 Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu Pro Gly  
 35 40 45  
 His Pro  
 50

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 <211> 345  
 <212> DNA  
 <213> Homo sapiens

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 120  
 gacccagtc tccggcgag cgcggggcgc ttgctcggct cgcaggtcat ccacagcggg  
 180  
 cacttcattg tgctcgtgcc gcacagcgac tcgctgcccc ggcggcgcca ccaggagggg  
 240  
 ccgtggggcc ctccgacttc gggccgcgca gtatcgaccc cacactcaca cgcctcttcg  
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 345

<210> 5650  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 5650  
 Met Ala Val Ala Ala Thr Ala Trp Ser Leu Gly Ser Arg Pro Ala  
 1 5 10 15  
 Gln Thr Arg Thr Arg Thr Gln Thr Arg Arg Thr Arg Val Ser Gly Ala  
 20 25 30  
 Ala Arg Ala Ala Cys Ser Ala Arg Arg Ser Ser Thr Ala Val Thr Ser  
 35 40 45  
 Trp Cys Arg Arg Arg Thr Ala Thr Arg Cys Pro Gly Gly Ala Thr Arg  
 50 55 60  
 Arg Val Arg Gly Ala Leu Arg Leu Arg Ala Ala Gln Tyr Arg Pro His  
 65 70 75 80  
 Thr His Thr Pro Leu Arg Val Leu Glu Pro Gly Leu Gln Trp Gln Ala  
 85 90 95  
 Gly Val Ser Gln

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          100          105          110
Pro Thr Val Asn Arg Ile Thr Pro Lys Thr Gln Gly Thr Asn Gln Ile
          115          120          125
Gln Lys Asn Thr Pro Ser Pro Asp Val Thr Leu Gly Thr Asn Pro Gly
          130          135          140
Thr Glu Asp Ile Gln Phe Pro Ile Gln Lys Ile Pro Leu Gly Leu Asp
145          150          155          160
Leu Lys Asn Leu Arg Leu Pro Arg Arg Lys Met Ser Phe Asp Ile Ile
          165          170          175
Asp Lys Ser Asp Val Phe Ser Arg Phe Gly Ile Glu Ile Ile Lys Trp
          180          185          190
Ala Gly Phe His Thr Ile Lys Leu Asp Tyr
          195          200

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<210> 5645  
 <211> 156  
 <212> DNA  
 <213> Homo sapiens

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<400> 5645
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aaagtccccg gcctctacta ctttgtctac cacgcg
156

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<210> 5646  
 <211> 52  
 <212> PRT  
 <213> Homo sapiens

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<400> 5646
Pro Arg Pro Ser Arg Arg Arg Asn Cys Arg Trp Ala Val Phe Gly Leu
1      5      10      15
Ala Gln Arg Cys Pro Gln Ile Ser Phe Pro Ser Pro Arg Gln Glu Asp
20     25     30
Thr Ser Thr Gly Lys Phe Thr Cys Lys Val Pro Gly Leu Tyr Tyr Phe
35     40     45
Val Tyr His Ala
50

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<210> 5647  
 <211> 150  
 <212> DNA  
 <213> Homo sapiens

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<400> 5647
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120
aagggagaac ccggcttacc cggccatccn
150

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 360  
 agtgatgaca gctactttcg caaagaatgt ggccgggata tggaattttc tcactctgat  
 420  
 tctcgggacc aggtcattgg ccaccggaaa ttggggcatt tccgtttctca ggactggaaa  
 480  
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 600  
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 660  
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 720  
 atcgttgacc aggaagggtt cctcctagga aagggggaga ctcagggcct gctcacagct  
 780  
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 840  
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 1080  
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 1200  
 cacagagatt tttgcttt  
 1218

&lt;210&gt; 5644

&lt;211&gt; 202

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5644

Trp	Glu	Gln	Asp	Phe	Gly	His	Pro	Val	Ser	Gln	Glu	Ser	Ser	Trp	Ser
1				5					10					15	
Gln	Glu	Tyr	Ser	Phe	Gly	Pro	Ser	Ala	Val	Leu	Gly	Asp	Phe	Gly	Ser
			20					25					30		
Ser	Arg	Leu	Ile	Glu	Lys	Glu	Cys	Leu	Glu	Lys	Glu	Ser	Arg	Asp	Tyr
			35				40					45			
Asp	Val	Asp	His	Pro	Gly	Glu	Ala	Asp	Ser	Val	Leu	Arg	Gly	Ser	Ser
			50				55				60				
Gln	Val	Gln	Ala	Arg	Gly	Arg	Ala	Leu	Asn	Ile	Val	Asp	Gln	Glu	Gly
65				70					75					80	
Ser	Leu	Leu	Gly	Lys	Gly	Glu	Thr	Gln	Gly	Leu	Leu	Thr	Ala	Lys	Gly
			85					90						95	
Gly	Val	Gly	Lys	Leu	Val	Thr	Leu	Arg	Asn	Val	Ser	Thr	Lys	Lys	Ile

515                      520                      525  
 Arg His Leu Gly Asp Met Phe Ser Ala Gly Pro Leu  
 530                      535                      540

<210> 5641  
 <211> 293  
 <212> DNA  
 <213> Homo sapiens

<400> 5641  
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 120  
 cagggtgggag aggaggtgtg gctggctggg gcacccctgg catccctgga gagccaggtg  
 180  
 aggagggcag atacaagcag aaattccagt cagtgttcac ggtcactcgg cagaccacc  
 240  
 agccccctgc acccaacagc ctgatcagat tcaacgcggg cctcaccaac ccg  
 293

<210> 5642  
 <211> 87  
 <212> PRT  
 <213> Homo sapiens

<400> 5642  
 Ala Ser His Thr Ala Asn Leu Cys Val Leu Leu Tyr Arg Ser Gly Val  
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 Lys Val Val Thr Phe Cys Gly His Ala Ser Lys Thr Asn Gln Val Asn  
 20                      25                      30  
 Ser Gly Gly Val Leu Leu Arg Leu Gln Val Gly Glu Glu Val Trp Leu  
 35                      40                      45  
 Ala Gly Ala Pro Leu Ala Ser Leu Glu Ser Gln Val Arg Arg Ala Asp  
 50                      55                      60  
 Thr Ser Arg Asn Ser Ser Gln Cys Ser Arg Ser Leu Gly Arg Pro Thr  
 65                      70                      75                      80  
 Ser Pro Leu His Pro Thr Ala  
 85

<210> 5643  
 <211> 1218  
 <212> DNA  
 <213> Homo sapiens

<400> 5643  
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 120  
 aaagccaaac gatatcacat ggatgccagt ggtgaggctg taagcgaaac tcttcagttt  
 180  
 aaagctcaag atctcttaag ggcagtccca agatccagag cagagatgta tgatgacgtc  
 240

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      85              90              95
Ala Asp Val Ile Leu Leu Val Thr Cys Ser Ile Arg Glu Lys Ala Glu
      100              105              110
Gln Thr Ile Trp Asn Arg Leu His Gln Leu Lys Ala Leu Lys Thr Arg
      115              120              125
Arg Pro Arg Ser Arg Val Pro Leu Arg Ile Gly Ile Leu Gly Cys Met
      130              135              140
Ala Glu Arg Leu Lys Glu Ile Leu Asn Arg Glu Lys Met Val Asp
      145              150              155              160
Ile Leu Ala Gly Pro Asp Ala Tyr Arg Asp Leu Pro Arg Leu Leu Ala
      165              170              175
Val Ala Glu Ser Gly Gln Gln Ala Ala Asn Val Leu Leu Ser Leu Asp
      180              185              190
Glu Thr Tyr Ala Asp Val Met Pro Val Gln Thr Ser Ala Ser Ala Thr
      195              200              205
Ser Ala Phe Val Ser Ile Met Arg Gly Cys Asp Asn Met Cys Ser Tyr
      210              215              220
Cys Ile Val Pro Phe Thr Arg Gly Arg Glu Arg Ser Arg Pro Ile Ala
      225              230              235              240
Ser Ile Leu Glu Glu Val Lys Lys Leu Ser Glu Gln Gly Leu Lys Glu
      245              250              255
Val Thr Leu Leu Gly Gln Asn Val Asn Ser Phe Arg Asp Asn Ser Glu
      260              265              270
Val Gln Phe Asn Ser Ala Val Pro Thr Asn Leu Ser Arg Gly Phe Thr
      275              280              285
Thr Asn Tyr Lys Thr Lys Gln Gly Gly Leu Arg Phe Ala His Leu Leu
      290              295              300
Asp Gln Val Ser Arg Val Asp Pro Glu Met Arg Ile Arg Phe Thr Ser
      305              310              315              320
Pro His Pro Lys Asp Phe Pro Asp Glu Val Leu Gln Leu Ile His Glu
      325              330              335
Arg Asp Asn Ile Cys Lys Gln Ile His Leu Pro Ala Gln Ser Gly Ser
      340              345              350
Ser Arg Val Leu Glu Ala Met Arg Arg Gly Tyr Ser Arg Glu Ala Tyr
      355              360              365
Val Glu Leu Val His His Ile Arg Glu Ser Ile Pro Gly Val Ser Leu
      370              375              380
Ser Ser Asp Phe Ile Ala Gly Phe Cys Gly Glu Thr Glu Glu Asp His
      385              390              395              400
Val Gln Thr Val Ser Leu Leu Arg Glu Val Gln Tyr Asn Met Gly Phe
      405              410              415
Leu Phe Ala Tyr Ser Met Arg Gln Lys Thr Arg Ala Tyr His Arg Leu
      420              425              430
Lys Asp Asp Val Pro Glu Glu Val Lys Leu Arg Arg Leu Glu Glu Leu
      435              440              445
Ile Thr Ile Phe Arg Glu Glu Ala Thr Lys Ala Asn Gln Thr Ser Val
      450              455              460
Gly Cys Thr Gln Leu Val Leu Val Glu Gly Leu Ser Lys Arg Ser Ala
      465              470              475              480
Thr Asp Leu Cys Gly Arg Asn Asp Gly Asn Leu Lys Val Ile Phe Pro
      485              490              495
Asp Ala Glu Met Glu Asp Val Asn Asn Pro Gly Leu Arg Val Arg Ala
      500              505              510
Gln Pro Gly Asp Tyr Val Leu Val Lys Ile Thr Xaa Gln Pro Val Leu

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tcggagggtcc agttcaacag tgcagtgcct accaatctca gtcgtgggtt taccaccaac  
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 2340  
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 2433

&lt;210&gt; 5640

&lt;211&gt; 540

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5640

Met	Cys	Pro	Ser	Pro	Glu	Arg	Gln	Glu	Asp	Gly	Ala	Arg	Lys	Asp	Phe
1				5				10					15		
Ser	Ser	Arg	Leu	Ala	Ala	Gly	Pro	Thr	Phe	Gln	His	Phe	Leu	Lys	Ser
		20					25					30			
Ala	Ser	Ala	Pro	Gln	Glu	Lys	Leu	Ser	Ser	Glu	Val	Glu	Asp	Pro	Pro
		35				40					45				
Pro	Tyr	Leu	Met	Met	Asp	Glu	Leu	Leu	Gly	Arg	Gln	Arg	Lys	Val	Tyr
	50				55				60						
Leu	Glu	Thr	Tyr	Gly	Cys	Gln	Met	Asn	Val	Asn	Asp	Thr	Glu	Ile	Ala
65				70				75				80			
Trp	Ser	Ile	Leu	Gln	Lys	Ser	Gly	Tyr	Leu	Arg	Pro	Val	Thr	Ser	Lys

130

&lt;210&gt; 5639

&lt;211&gt; 2433

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5639

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ccaacaatta ttgcagcaca taatcaatat aaacattata tatatgaact atttgacact  
120  
atttgacatt tcttcttcca catccagtgt atctgacatt tagcgcacat ttgatttgca  
180  
ctcaccact ttgaggagct caattgccgc ttaagtccgt ggctagtggc tgccctaaag  
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480  
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720  
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780  
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960  
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1140  
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1260  
cggggcaggg agaggagtcg gcctattgcc tccattctag aggaagtga gaagctttct  
1320  
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1380

&lt;400&gt; 5637

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 120  
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 240  
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 480  
 ctggttctgt gacccatccc aggcacacgc tcccctggct gggcgccctg ccagggtccc  
 540  
 cctgtggctg gcgtgtggag acacgtgggc ctttctccac gtgccacga gggccgtagc  
 600  
 aggtccaag gagggccagc cccggccagc ctgtgtggac cccgcgggcc tgcgcgcccc  
 660  
 ggagctgctg actgtgtcag agcccggtg cccagcgcgc cggcgcctc cctccagctg  
 720  
 cccagcctgg gatccgtccg ctgtctgtct cctgaaccag ggagtctgac ccactcacag  
 780  
 ctcccatggg gtccgtgcag ccaaggcccc gcagccacac tcaact  
 825

&lt;210&gt; 5638

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5638

Met Pro Cys Gly Asn Arg Ser Gln Asp Pro Val Glu Asn Pro Arg Cys  
 1 5 10 15  
 Leu Asn Ile Asn Lys Ser Asp Ser His Ser Pro Thr Val Leu Ala Ser  
 20 25 30  
 Leu Thr Gly Ala Arg Trp Phe Cys Asp Pro Ser Gln Ala His Ala Pro  
 35 40 45  
 Leu Ala Gly Arg Leu Ala Arg Ala Pro Leu Trp Leu Ala Cys Gly Asp  
 50 55 60  
 Thr Trp Ala Leu Leu His Val Pro Thr Arg Ala Val Ala Gly Ser Lys  
 65 70 75 80  
 Glu Ala Gln Pro Arg Pro Ala Cys Val Asp Pro Ala Gly Leu Arg Ala  
 85 90 95  
 Pro Glu Leu Leu Thr Val Ser Glu Pro Gly Cys Pro Ala Pro Arg Arg  
 100 105 110  
 Pro Pro Ser Ser Cys Pro Ala Trp Asp Pro Ser Ala Val Cys Leu Leu  
 115 120 125  
 Asn Gln Gly Val

aaagaatctc ttgatccaaa tacatcttat ggggagccct accagcacia tactccatta  
 240  
 cattatgctg ctagacatgg aatgaataaa atattaggag atgatttcag aagagcagat  
 300  
 tgtctgcaga tgatcttaaa atggaaagga gcaaaacttg accagggtga atatgagaga  
 360  
 gcagctattg atgctgttga taacaaaaaa aacacaccct tgcactatgc tgctgcctca  
 420  
 gggatgaaag cctgtgtaga aaaacatgga ggagacttgt ttgctgagaa tgaaaataaa  
 480  
 gatactcctt gtgattgtgc tgaaaagcaa caccacaaag atttggccct caatctggaa  
 540  
 tctcaaatgg tattctcacg ggatcccag gctgaagaaa tagaagctga atatgctgca  
 600  
 ttagacaaac gaga  
 614

<210> 5636

<211> 204

<212> PRT

<213> Homo sapiens

<400> 5636

Xaa	Val	Lys	Asp	Val	Ala	Glu	Val	Phe	Gln	Lys	Trp	Leu	Lys	Ile	Glu
1			5						10					15	
Gly	Lys	Lys	Cys	His	Cys	Leu	Ser	Glu	Lys	Thr	Lys	Gln	Asn	Met	Gly
			20					25					30		
Asn	Thr	Thr	Thr	Lys	Phe	Arg	Lys	Ala	Leu	Ile	Asn	Gly	Asp	Glu	Asn
			35				40					45			
Leu	Ala	Cys	Gln	Ile	Tyr	Glu	Asn	Asn	Pro	Gln	Leu	Lys	Glu	Ser	Leu
	50					55				60					
Asp	Pro	Asn	Thr	Ser	Tyr	Gly	Glu	Pro	Tyr	Gln	His	Asn	Thr	Pro	Leu
65					70					75				80	
His	Tyr	Ala	Ala	Arg	His	Gly	Met	Asn	Lys	Ile	Leu	Gly	Asp	Asp	Phe
			85					90					95		
Arg	Arg	Ala	Asp	Cys	Leu	Gln	Met	Ile	Leu	Lys	Trp	Lys	Gly	Ala	Lys
			100					105					110		
Leu	Asp	Gln	Gly	Glu	Tyr	Glu	Arg	Ala	Ala	Ile	Asp	Ala	Val	Asp	Asn
		115					120					125			
Lys	Lys	Asn	Thr	Pro	Leu	His	Tyr	Ala	Ala	Ala	Ser	Gly	Met	Lys	Ala
		130				135					140				
Cys	Val	Glu	Lys	His	Gly	Gly	Asp	Leu	Phe	Ala	Glu	Asn	Glu	Asn	Lys
145					150					155				160	
Asp	Thr	Pro	Cys	Asp	Cys	Ala	Glu	Lys	Gln	His	His	Lys	Asp	Leu	Ala
			165					170					175		
Leu	Asn	Leu	Glu	Ser	Gln	Met	Val	Phe	Ser	Arg	Asp	Pro	Glu	Ala	Glu
		180						185					190		
Glu	Ile	Glu	Ala	Glu	Tyr	Ala	Ala	Leu	Asp	Lys	Arg				
		195						200							

<210> 5637

<211> 825

<212> DNA

<213> Homo sapiens

&lt;213&gt; Homo sapiens

&lt;400&gt; 5634

```

Pro Thr Ala Ser Pro Ser Ser Trp Gln Ser Val Leu Arg Ala Trp Thr
 1           5           10           15
Leu Thr Val Arg Ser Leu Leu Asp Thr Arg Glu His Cys Leu Asn Glu
          20           25           30
Phe Asn Phe Pro Asp Pro Tyr Ser Lys Val Lys Gln Arg Glu Asn Gly
          35           40           45
Val Ala Leu Arg Cys Phe Pro Gly Val Val Arg Ser Leu Asp Ala Leu
          50           55           60
Gly Trp Glu Glu Arg Gln Leu Ala Leu Val Lys Gly Leu Leu Ala Gly
65           70           75           80
Asn Val Phe Asp Trp Gly Ala Lys Ala Val Ser Ala Val Leu Glu Ser
          85           90           95
Asp Pro Tyr Phe Gly Phe Glu Glu Ala Lys Arg Lys Leu Gln Glu Arg
          100          105          110
Pro Trp Leu Val Asp Ser Tyr Ser Glu Trp Leu Gln Arg Leu Lys Gly
          115          120          125
Pro Pro His Lys Cys Ala Leu Ile Phe Ala Asp Asn Ser Gly Ile Asp
          130          135          140
Ile Ile Leu Gly Val Phe Pro Phe Val Arg Glu Leu Leu Leu Arg Gly
145          150          155          160
Thr Glu Val Ile Leu Ala Cys Asn Ser Gly Pro Ala Leu Asn Asp Val
          165          170          175
Thr His Ser Glu Ser Leu Ile Val Ala Glu Arg Ile Ala Gly Met Asp
          180          185          190
Pro Val Val His Ser Ala Leu Gln Glu Glu Arg Leu Leu Leu Val Gln
          195          200          205
Thr Gly Ser Ser Ser Pro Cys Leu Asp Leu Ser Arg Leu Asp Lys Gly
          210          215          220
Leu Ala Ala Leu Val Arg Glu Arg Gly Ala Asp Leu Val Val Ile Glu
225          230          235          240
Gly Met Gly Arg Ala Val His Thr Asn Tyr His Ala Ala Leu Arg Cys
          245          250          255
Glu Ser Leu Lys Leu Ala Val Ile Lys Asn Ala Trp Leu Ala Glu Arg
          260          265          270
Leu Gly Gly Arg Leu Phe Ser Val Ile Phe Lys Tyr Glu Val Pro Ala
          275          280          285
Glu

```

&lt;210&gt; 5635

&lt;211&gt; 614

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5635

```

nntgtgaaag atgttcgaga agtgttccag aagtggtcga agatagaagg aaaaaagtgc
60
cactgcctat cagaaaaaac aaaacaaaac atgggaaata caaccaccaa attccgtaaa
120
gcactcatca atggtgatga aaacctggcc tgccaaatat atgaaaacaa tcctcagcta
180

```

cggtctttca gcgccatctt caagtacgag gtcccagccg agtgaggcgc tgcagctgcc  
780  
ggactcttct gcttgtcact tgtccgagtg gcttcagaga ttaaaggggc cccctcataa  
840  
atgtgcctta attttcgcag ataacagggg gaatagacat ctttttgga gtcttccct  
900  
ttgtcaggga gctactcctt agagggacag aggtcatcct ggcgtgcaac tcaggccccg  
960  
ccctgaacga cgtgaccac agcgagtccc tcatcgtggc agagcgtatt gcgggcatgg  
1020  
accctgaccg tgcgcagcct gctggacacc agggagcact gtctgaacga gttcaacttc  
1080  
ccggtacccct actccaaagt gaagcagcgg gagaatggcg tggcgctgag gtgcttcccc  
1140  
gggggtcgtgc gctccctgga cgcgctgggc tgggaggaac ggcagctggc gctgggtgaa  
1200  
ggcctcctgg cggggaatgt cttcgactgg ggggccaaag ccgtgtctgc tgccttgaa  
1260  
tccgaccctt actttgggtt tgaagaagca aagaggaagt tacaagaaag accctggctc  
1320  
gtggattcct acagcgagtg gcttcagaga ttaaaggggc cccctcataa atgtgcctta  
1380  
attttcgcag ataacagtgg aatagacatc attttgggag tcttccctt tgtcaggag  
1440  
ctactcctta gagggacaga ggtcatcctg gcgtgcaact caggccccgc cctgaacgac  
1500  
gtgaccacac gcgagtccct catcgtggca gagcgtattg cgggcatgga ccctgtcgtg  
1560  
cactctgcgc tccaggaaga gaggtgctg ctggtgcaga cgggctccag ctccccgtgc  
1620  
ctcgacctca gccgcctgga taaggggctg gccgcactgg tgcgggagcg tggcgcgat  
1680  
ctgggtggtca tcgaggcat gggccgtgct gtccacacaa actaccacgc agccctgcgc  
1740  
tgcgagagcc tcaagctggc cgtcatcaag aacgcgtggc tggccgagcg gctgggaggc  
1800  
cggtctttca gcgtcatctt caagtacgag gtcccagccg agtgaggcgc tgcagctgcc  
1860  
ggactcttct gcttgtcact tgtcaggaat gtgtttttac caccacaggg aaactgcgtt  
1920  
caaatcaacg ttttatatg gtactgctgt gacgcggcac atacaccca gccgcacaga  
1980  
tgcgtgtgac ccagaggcga gacgcagctt tgcctggga gacgttcata ttggaatcta  
2040  
tttaactgct aaagaacctt ttatatatat atatatatat aaatagagag atctatacag  
2100  
gtatgtctga cgggacgcag caccgtgggc acgcacaaa tagagttttt aaaagaggaa  
2160  
aaaaaactct atttggtgcg t  
2181

&lt;210&gt; 5634

&lt;211&gt; 289

&lt;212&gt; PRT

```

      1             5             10             15
Ala Gly Ala Gly Ala Gly His Leu Thr Pro Gln Ala Ser Pro Thr Ser
      20             25             30
Glu Leu Pro Thr Ala Lys Thr Pro Gly Glu Ala Gly Arg Gly Gly Val
      35             40             45
Arg Gly Lys Glu Gly Leu Cys Glu Ser Lys Pro His Pro Gln Ser Arg
      50             55             60
Ala Glu Thr Gln Val Cys Lys Ser His Pro Pro Pro Thr Ser Ser Ser
      65             70             75             80
Phe Glu Ala Ser Ser Thr Arg Gly Arg Ala Gly Ala Ala Gln Arg Pro
      85             90             95
Glu Lys Gly Lys Pro His Arg Arg Lys Leu Lys Ala Ser Val Pro Cys
      100            105            110
Val Ser Ala Glu Arg Val Asn Gly Pro Lys Gly Ser Ser Leu Gln Thr
      115            120            125
Ala Arg Ile His Pro Thr Gly Gly His Arg Thr Arg Pro Gly Pro Ser
      130            135            140
Ala Ser Val Pro Val Gln Pro Thr Pro Val Gln Pro Gly Ala Leu Ser
      145            150            155            160
Asp Leu Thr Thr Arg Val Pro Ser Thr Cys Val His Thr Gln Met Gln
      165            170            175
Glu Arg Thr His Thr Thr Val
      180

```

&lt;210&gt; 5633

&lt;211&gt; 2181

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5633

```

gccaatgtcc ctgtggccac tcagctgaga ccgagggcga cctgggcagc tgcgggtgtc
60
tgtcacctcc gtgtcccaca tagatgccag gctctgcttc tgtggttctg gaggtcatta
120
gtcaattgta tgtggtgctg tctgtctctc tgattgcaga ggaggaagga accccttaaa
180
tgagcggggt ctgagtgtg gggccgctgg tctgctctgc ctggtgggat tctccagtgc
240
tggtttcatc tgtgccccag cccactctc accaacaagg agggcgtgaa aatgacaagg
300
aatccatccc tagagttcac aggagatcta gggcagagtt tccaagctgc agctgctctg
360
gccctgtgtg agctgctgct ctgaggaagc ccagggctga ggtagctacc aggcggaggc
420
tggttttgga ggcctccaca tcagggaatt gagcggtagg gggttcagcc ttcacgttgg
480
tcgccgcact gtatgggaag tggggtctgg ggtctgcttg ccagctctca ccgtctctt
540
cctccccaaa gccgcctgga taaggggctg gccgcactgg tgcgggagcg tggcgcggat
600
ctgggtgtca tcgagggcac gggccgtgct gtccacacaa actaccacgc agccctgcgc
660
tgcgagagcc tcaagctggc cgtcatcaag aacgcgtggc tggccgagcg gctgggcggc
720

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<400> 5632  
Met Gly Val Pro Trp Ala Trp Arg Arg Gln Gln Glu Gly Val Thr Gly

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<210> 5629
<211> 428
<212> DNA
<213> Homo sapiens
```

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<400> 5629
gtgcacgacc ccactgaatc atcccacaac catggatggg agacacactc agtctccttt
60
aacagaagat aaagctgggg cttacagaga atgtacaact tggcccaggg cacaccagtt
120
agccatcagg ggcagngctg ctattcaggt ctgggactgt gggactccag agcccatggt
180
ttttacgagg atgccatact gccacaatgg atggtgtctt tatctcctga tatatgattg
240
tgtgttgagg ggcgtggggg ggcagctgga agaattggaga ggcatatttg tggaggatct
300
tccccattc tctgctaccc tctcttgagg ctcccagttc catctgagaa attatctact
360
ctgagaaatc gtcacaacac agcatgggtg tgagtgcagt ggcagaagcc tgtgcctggg
420
tgtatggg
428

```

```
<210> 5630
<211> 110
<212> PRT
<213> Homo sapiens
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```

<400> 5630
Met Asp Gly Arg His Thr Gln Ser Pro Leu Thr Glu Asp Lys Ala Gly
 1             5             10             15
Ala Tyr Arg Glu Cys Thr Thr Trp Pro Arg Ala His Gln Leu Ala Ile

```

ctctcctatc atcctggcaa ctcttgctcc accacaaccc cagggccagt gatccaacaa  
 600  
 cagcatcacc tgggggcttc ctacctctg cgacctgggg ctgggcactg tcaggagctg  
 660  
 gtgctcaccg aggatgagaa gaagctgctg gctaaagaag gcatcacctt gccactcag  
 720  
 ctgccccca ctaagtacga ggagcgagt ctgaaaaaa tccgccgga aatccggaac  
 780  
 aagcagtcgg cgcaagaaag caggaagaag aagaaggaat atatcgatgg cctggagact  
 840  
 cggtcctgtt gctgtccttt gccctcatca tcctcccttc catcagccct ttggcccca  
 900  
 aaaaaaccga gagccctggg gactttgcgc ctgtacgagt gttctccaga actttgcaca  
 960  
 acgatgctgc ctcccgcgtg gctgctgatg ctgtgccagg ctccgaggcc ccaggacccc  
 1020  
 gacccgaggc tgacacaacc cgagaagagt ctccaggaag ccccggggca gactggggct  
 1080  
 tccaggacac cgcgaacctg accaattcga cggaggagct ggacaacgcc accctggtcc  
 1140  
 tgaggaaatgc aacagagggg ctgggcccagg tcgccctgct ggactgggtg gcgcctgggc  
 1200  
 cgagcactgg ctccaggactg gcagggctgg aggcggcggg agacgagctg tgagccccac  
 1260  
 caggactatg ctcccaggcc cctctgcca ggggtgcctt ggggatgctg cactgggcag  
 1320  
 ctaccacctt ggggatggga cgtgaggcca agaccccagc agagatgcca gaatggggga  
 1380  
 ggcacagctc atagccacac a  
 1401

<210> 5628

<211> 299

<212> PRT

<213> Homo sapiens

<400> 5628

Met	Ala	Ser	Ala	Ala	Cys	Ser	Met	Asp	Pro	Ile	Asp	Ser	Phe	Glu	Leu
1				5					10					15	
Leu	Asp	Leu	Leu	Phe	Asp	Arg	Gln	Asp	Gly	Ile	Leu	Arg	His	Val	Glu
			20					25					30		
Leu	Gly	Glu	Gly	Trp	Gly	His	Val	Lys	Asp	Gln	Val	Leu	Pro	Asn	Pro
		35					40					45			
Asp	Ser	Asp	Asp	Phe	Leu	Ser	Ser	Ile	Leu	Gly	Ser	Gly	Asp	Ser	Leu
	50					55					60				
Pro	Ser	Ser	Pro	Leu	Trp	Ser	Pro	Glu	Gly	Ser	Asp	Ser	Gly	Ile	Ser
65				70					75					80	
Glu	Asp	Leu	Pro	Ser	Asp	Pro	Gln	Asp	Thr	Pro	Pro	Arg	Ser	Gly	Pro
			85					90						95	
Ala	Thr	Ser	Pro	Ala	Gly	Cys	His	Pro	Ala	Gln	Pro	Gly	Lys	Gly	Pro
			100					105					110		
Cys	Leu	Ser	Tyr	His	Pro	Gly	Asn	Ser	Cys	Ser	Thr	Thr	Thr	Pro	Gly
		115					120					125			
Pro	Val	Ile	Gln	Gln	Gln	His	His	Leu	Gly	Ala	Ser	Tyr	Leu	Leu	Arg

115	120	125
Gln Leu Ala Gln Leu His Thr Leu Glu Lys Asp Leu Val Ser Ala Cys		
130	135	140
Asp Leu Leu Gly Val Gly Ala Glu Tyr Ala Arg Val Val Gly Ser Glu		
145	150	155
Tyr Thr Arg Ala Leu Phe Leu Leu Ser Lys Gly Met Leu Leu Leu Met		
165	170	175
Glu Arg Lys Leu Gln Glu Val His Pro Leu Leu Thr Leu Cys Gly Gln		
180	185	190
Ile Val Glu Asn Trp Gln Gly Asn Pro Ile Gln Lys Glu Ser Leu Arg		
195	200	205
Val Phe Phe Leu Val Leu Gln Val Thr His Tyr Leu Asp Ala Gly Gln		
210	215	220
Val Lys Ser Val Lys Pro Cys Leu Lys Gln Leu Gln Gln Cys Ile Gln		
225	230	235
Thr Ile Ser Thr Leu His Asp Asp Glu Ile Leu Pro Ser Asn Pro Ala		
245	250	255
Asp Leu Phe His Trp Leu Pro Lys Glu His Met Cys Val Leu Val Tyr		
260	265	270
Leu Val Thr Val Met His Ser Met Gln Ala Gly Tyr Leu Glu Lys Ala		
275	280	285
Gln Lys Tyr Thr Asp Lys Ala Leu Met Gln Leu Glu Lys Leu Lys Met		
290	295	300
Leu Asp Cys Ser Pro Ile Leu Ser Ser Phe Gln Val Ile Leu Leu Glu		
305	310	315
His Ile Ile Met Cys Arg Leu Val Thr Gly His Lys Ala Thr Ala Leu		
325	330	335
Gln Glu Ile		

&lt;210&gt; 5627

&lt;211&gt; 1401

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5627

nctctcacac tgtggaattc tctctatcag cctcaaagtc cagatttgga aagggagtct  
60

cagcgagggg cagcagctgg cccaaccgg aggcagagcg gcaactgaac tctagccgga  
120

aagagccagg gttatgtgca catgggaggt ggggaggaca ggggctgtat gtgaccctca  
180

catctgttcc tcgcgeccca gatggcttct gctgctgct ccatggaccc catcgacagc  
240

tttgagctcc tggatctcct gtttgaccgg caggacggca tcttgagaca cgtggagctg  
300

ggcgagggct ggggtcacgt caaggaccag gtcctgccaa accccgactc tgacgacttc  
360

ctcagctcca tcctgggctc tggagactca ctgccagct cccactctg gtccccgaa  
420

ggcagtgata gtggcatctc cgaagacctc ccctccgacc cccaggacac ccctccacgc  
480

agcggaccag ccacctcccc cgccggtgc catcctgcc agcctggcaa ggggcctgc  
540

cccaaaatcc gcctgtgcgt gcaactgcctg caggccgtgt tccccttcaa gccgcccag  
 120  
 cgcacgagg cccgtacaca cctgcagctg ggctccgttc tctatcacca caccaagaac  
 180  
 agcgagcagg cgcgacagcca cctggagaag gcgtgggtga tatcacagca aatcccacag  
 240  
 ttcgaagatg ttaaatttga agcagcaagt ctgttgtctg aattgtactg tcaagagaat  
 300  
 tccgttgatg cagcaaagcc gctgctgcgg aaggcgatcc agatctcaca gcagacccca  
 360  
 tattggcact gccgcctgct cttccagctc gctcaactgc acacgcttga gaaggacctg  
 420  
 gtgtcggcct gtgacctcct gggtgtaggg gccgagtacg cccgggtggt gggatctgaa  
 480  
 tacacacggg cgctgttcct cctcagcaag gggatgctgc tgctgatgga gcgaaagctg  
 540  
 caggaggtgc acccgctgct gaccctctgc gggcagatcg tggagaactg gcaggggaac  
 600  
 cccatccaga aggagtcgct gcgtgtcttc ttcttggtgc tccaggtcac ccactatctg  
 660  
 gatgccgggc aggtgaagag cgtgaagccg tgtctgaagc agctgcagca gtgcatccag  
 720  
 accatctcca cactgcacga tgatgagatc ctgccagca accccgctga cctcttccac  
 780  
 tggctgcccagaggagcacat gtgtgtgctt gtctacctgg tgactgtgat gcactccatg  
 840  
 caggccggct acctggagaa ggcgcagaag tacacggaca aggcctcat gcagctggag  
 900  
 aagctcaaga tgctggactg cagccccatc ctgtcatcct tccaagtgat cctgctggag  
 960  
 cacatcatca tgtgccgct tgtcacgggt cacaaggcca cggcgctgca ggagatc  
 1017

&lt;210&gt; 5626

&lt;211&gt; 339

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5626

Ala	Asp	Ser	Trp	Tyr	Leu	Ala	Leu	Leu	Gly	Phe	Ala	Glu	His	Phe	Arg
1				5					10					15	
Thr	Ser	Ser	Pro	Pro	Lys	Ile	Arg	Leu	Cys	Val	His	Cys	Leu	Gln	Ala
			20					25					30		
Val	Phe	Pro	Phe	Lys	Pro	Pro	Gln	Arg	Ile	Glu	Ala	Arg	Thr	His	Leu
			35				40					45			
Gln	Leu	Gly	Ser	Val	Leu	Tyr	His	His	Thr	Lys	Asn	Ser	Glu	Gln	Ala
			50			55					60				
Arg	Ser	His	Leu	Glu	Lys	Ala	Trp	Leu	Ile	Ser	Gln	Gln	Ile	Pro	Gln
					70				75					80	
Phe	Glu	Asp	Val	Lys	Phe	Glu	Ala	Ala	Ser	Leu	Leu	Ser	Glu	Leu	Tyr
				85				90					95		
Cys	Gln	Glu	Asn	Ser	Val	Asp	Ala	Ala	Lys	Pro	Leu	Leu	Arg	Lys	Ala
			100					105					110		
Ile	Gln	Ile	Ser	Gln	Gln	Thr	Pro	Tyr	Trp	His	Cys	Arg	Leu	Leu	Phe

```

          35          40          45
Leu Ser Ala Arg Leu Ala Ser Ile Ser Arg Arg Arg Ser Ser Arg Phe
          50          55          60
Phe Arg Ala Ser Ser Ala Leu Thr Cys Pro Gly Cys Trp Asp Val Gln
65          70          75          80
Thr Gly

```

<210> 5623  
 <211> 357  
 <212> DNA  
 <213> Homo sapiens

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<400> 5623
nctggaagaa ctcgtcatgc tctttgtagc gtggtgcttc tgttgctcac aggacaactt
60
gcctttgatg attttcaaga gagttgtgct atgatgtggc aaaagtatgc aggaagcagg
120
cggcfaatgc ctctgggagc aaggatcctt ttccacggtg tgttctatgc cgggggcttt
180
gccattgtgt attacctcat tcaaaagttt cattccaggg ctttatatta caagttggca
240
gtggagcagc tgcagagcca tcccgaggca caggaagctc tgggccctcc tctcaacatc
300
cattatctca agctcatcga cagggaaaac ttcgtggaca ttgttgatgc caagttg
357

```

<210> 5624  
 <211> 88  
 <212> PRT  
 <213> Homo sapiens

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<400> 5624
Met Trp Gln Lys Tyr Ala Gly Ser Arg Arg Ser Met Pro Leu Gly Ala
1          5          10          15
Arg Ile Leu Phe His Gly Val Phe Tyr Ala Gly Gly Phe Ala Ile Val
          20          25          30
Tyr Tyr Leu Ile Gln Lys Phe His Ser Arg Ala Leu Tyr Tyr Lys Leu
          35          40          45
Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly
          50          55          60
Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe
65          70          75          80
Val Asp Ile Val Asp Ala Lys Leu
          85

```

<210> 5625  
 <211> 1017  
 <212> DNA  
 <213> Homo sapiens

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<400> 5625
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      180      185      190
Thr Leu Glu Gly Val Glu Ala Ser Leu Phe Tyr Gln Cys Leu Glu Asn
      195      200      205
Leu Cys Asp Arg His Lys Tyr Ser Cys Pro Pro Pro Ala Leu Val Lys
      210      215      220
Glu Ala Leu Ser Asn Val Gln Arg Leu Thr Phe Tyr Gly Phe Leu Met
      225      230      235      240
Ala Leu Ser Lys His Arg Gly Ile Asn Gln Ala Leu Gly Lys Ser Glu
      245      250      255
Leu Ser Ser Arg Gln Pro Leu Leu Pro His Asn Thr Gly Ser Ser Trp
      260      265      270
Pro Leu Leu Ala Thr Arg Leu Gln Arg Gly Arg Gly Ile Thr Ile Ser
      275      280      285
Ala Leu Thr Ser Gln Gly Arg Thr Gln Ser Gln Gly Ala Gly Ile Trp
      290      295      300
Arg Gln Asn Met Ala Leu Thr His Ser His Gly Arg Gly Gln Pro Ser
      305      310      315      320
Leu Pro Ala Ala Leu Pro Gln His Glu Thr Thr Ser Pro
      325      330

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&lt;210&gt; 5621

&lt;211&gt; 456

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5621

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cggaagggc caccgccacg gttagtcca gttccgggc tccagcttc atggggccct
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360
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420
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456

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&lt;210&gt; 5622

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5622

```

Met Ala Trp Leu Gly Arg Pro Gly Ser His Gly Leu Tyr Asn Lys Tyr
1      5      10      15
Ile Cys Gly Ala Gly Ser Pro Gln Pro Gly Arg Ala Thr Ala Thr Val
20      25      30
Gln Ser Ser Phe Arg Ala Pro Ser Phe Met Gly Pro Leu Ala Thr Phe

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 660  
 aaaacctgtg tgatcggcac aagtacagct gcccaccccc agcacttgct aaagaggccc  
 720  
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 780  
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 840  
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 1080  
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 1200  
 agaccttttt tccaagctg  
 1219

<210> 5620

<211> 333

<212> PRT

<213> Homo sapiens

<400> 5620

Met	Leu	Ser	Pro	Glu	Arg	Leu	Ala	Leu	Pro	Asp	Tyr	Glu	Tyr	Leu	Ala
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Gln	Arg	His	Val	Leu	Thr	Tyr	Met	Glu	Asp	Ala	Val	Cys	Gln	Leu	Leu
			20					25					30		
Glu	Asn	Arg	Glu	Asp	Ile	Ser	Gln	Tyr	Gly	Ile	Ala	Arg	Phe	Phe	Thr
			35				40						45		
Glu	Tyr	Phe	Asn	Ser	Val	Cys	Gln	Gly	Thr	His	Ile	Leu	Phe	Arg	Glu
			50				55				60				
Phe	Ser	Phe	Val	Gln	Ala	Thr	Pro	His	Asn	Arg	Val	Ser	Phe	Leu	Arg
					70					75				80	
Ala	Phe	Trp	Arg	Cys	Phe	Arg	Thr	Val	Gly	Lys	Asn	Gly	Asp	Leu	Leu
					85				90					95	
Thr	Met	Lys	Glu	Tyr	His	Cys	Leu	Leu	Gln	Leu	Leu	Cys	Pro	Asp	Phe
			100						105				110		
Pro	Leu	Glu	Leu	Thr	Gln	Lys	Ala	Ala	Arg	Ile	Val	Leu	Met	Asp	Asp
			115				120					125			
Ala	Met	Asp	Cys	Leu	Met	Ser	Phe	Ser	Asp	Phe	Leu	Phe	Ala	Phe	Gln
			130				135				140				
Ile	Gln	Phe	Tyr	Tyr	Ser	Glu	Phe	Leu	Asp	Ser	Val	Ala	Ala	Ile	Tyr
					150					155				160	
Glu	Asp	Leu	Leu	Ser	Gly	Lys	Asn	Pro	Asn	Thr	Val	Ile	Val	Pro	Thr
					165					170				175	
Ser	Ser	Ser	Gly	Gln	His	Arg	Gln	Arg	Pro	Ala	Leu	Gly	Gly	Ala	Gly

770		775		780
Trp Val Glu Ser Glu Cys Pro Glu Lys Glu Lys Leu Pro Gln Glu Trp				
785		790		800
Lys Lys Lys Ser Leu Ile Gln Lys Leu Ile Leu Leu Arg Ala Met Arg				
	805		810	815
Pro Asp Arg Met Thr Tyr Ala Leu Arg Asn Phe Val Glu Glu Lys Leu				
	820		825	830
Gly Ala Lys Tyr Val Glu Arg Thr Arg Leu Asp Leu Val Lys Ala Phe				
	835		840	845
Glu Glu Ser Ser Pro Ala Thr Pro Ile Phe Phe Ile Leu Ser Pro Gly				
	850		855	860
Val Asp Ala Leu Lys Asp Leu Glu Ile Leu Gly Lys Arg Leu Gly Phe				
865		870		880
Thr Ile Asp Ser Gly Lys Phe His Asn Val Ser Leu Gly Gln Gly Gln				
	885		890	895
Glu Thr Val Ala Glu Val Ala Leu Glu Lys Ala Ser Lys Gly Gly His				
	900		905	910
Trp Val Ile Leu Gln Asn Val His Leu Val Ala Lys Trp Leu Gly Thr				
	915		920	925
Leu Glu Lys Leu Leu Glu Arg Phe Ser Gln Gly Ser His Arg Asp Tyr				
	930		935	940
Arg Val Phe Met Ser Ala Glu Ser Ala Pro Thr Pro Asp Glu His Ile				
945		950		960
Ile Pro Gln Gly Leu Leu Glu Asn Ser Ile Lys Ile Thr Asn Glu Pro				
	965		970	975
Pro Thr Gly Met Leu Ala Asn Leu His Ala Ala Leu Tyr Asn Phe Asp				
	980		985	990
Gln Val Arg Lys Arg Ser Arg Leu Gly Arg Gln				
	995		1000	

&lt;210&gt; 5619

&lt;211&gt; 1219

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5619

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180
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300
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360
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420
acgatgccat ggactgcttg atgtcttttt cagatttctt ctttgcttcc cagatccagt
480
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540

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4803

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 3420  
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 3480

<210> 5618

<211> 1003

<212> PRT

<213> Homo sapiens

<400> 5618

His	Lys	Asp	Ser	Ile	Ser	Leu	Phe	Met	Ala	His	Val	His	Thr	Thr	Val
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Asn	Glu	Met	Ser	Thr	Arg	Tyr	Tyr	Gln	Asn	Glu	Arg	Arg	His	Asn	Tyr
		20						25					30		
Thr	Thr	Pro	Lys	Ser	Phe	Leu	Glu	Gln	Ile	Ser	Leu	Phe	Lys	Asn	Leu
		35					40					45			
Leu	Lys	Lys	Lys	Gln	Asn	Glu	Val	Ser	Glu	Lys	Lys	Glu	Arg	Leu	Val
	50					55					60				
Asn	Gly	Ile	Gln	Lys	Leu	Lys	Thr	Thr	Ala	Ser	Gln	Val	Gly	Asp	Leu
65					70					75				80	
Lys	Ala	Arg	Leu	Ala	Ser	Gln	Glu	Ala	Glu	Leu	Gln	Leu	Arg	Asn	His
			85						90					95	
Asp	Ala	Glu	Ala	Leu	Ile	Thr	Lys	Ile	Gly	Leu	Gln	Thr	Glu	Lys	Val
		100						105					110		
Ser	Arg	Glu	Lys	Thr	Ile	Ala	Asp	Ala	Glu	Glu	Arg	Lys	Val	Thr	Ala
		115					120					125			
Ile	Gln	Thr	Glu	Val	Phe	Gln	Lys	Gln	Arg	Glu	Cys	Glu	Ala	Asp	Leu
	130					135					140				
Leu	Lys	Ala	Glu	Pro	Ala	Leu	Val	Ala	Ala	Thr	Ala	Ala	Leu	Asn	Thr
145					150					155				160	
Leu	Asn	Arg	Val	Asn	Leu	Ser	Glu	Leu	Lys	Ala	Phe	Pro	Asn	Pro	Pro
			165						170					175	
Ile	Ala	Val	Thr	Asn	Val	Thr	Ala	Ala	Val	Met	Val	Leu	Leu	Ala	Pro
		180						185						190	
Arg	Gly	Arg	Val	Pro	Lys	Asp	Arg	Ser	Trp	Lys	Ala	Ala	Lys	Val	Phe
		195					200					205			
Met	Gly	Lys	Val	Asp	Asp	Phe	Leu	Gln	Ala	Leu	Ile	Asn	Tyr	Asp	Lys
	210					215						220			
Glu	His	Ile	Pro	Glu	Asn	Cys	Leu	Lys	Val	Val	Asn	Glu	His	Tyr	Leu
225					230					235					240
Lys	Asp	Pro	Glu	Phe	Asn	Pro	Asn	Leu	Ile	Arg	Thr	Lys	Ser	Phe	Ala
			245						250					255	
Ala	Ala	Gly	Leu	Cys	Ala	Trp	Val	Ile	Asn	Ile	Ile	Lys	Phe	Tyr	Glu
		260						265						270	
Val	Tyr	Cys	Asp	Val	Glu	Pro	Lys	Arg	Gln	Ala	Leu	Ala	Gln	Ala	Asn
		275					280					285			
Leu	Glu	Leu	Ala	Ala	Ala	Thr	Glu	Lys	Leu	Glu	Ala	Ile	Arg	Lys	Lys
	290					295					300				
Leu	Val	Val	Ser	Ala	Asn	Tyr	Asp	Ile	Glu	Lys	Ser	Glu	Lys	Ile	Arg
305					310					315					320
Trp	Gly	Gln	Ser	Ile	Lys	Ser	Phe	Glu	Ala	Gln	Glu	Lys	Thr	Leu	Cys
			325						330					335	
Gly	Asp	Val	Leu	Leu	Thr	Ala	Ala	Phe	Val	Ser	Tyr	Val	Gly	Pro	Phe

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1740

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      195      200      205
Glu Ser Ser Glu Ala Gln Val Gln Lys Phe Leu Ser Arg Ser Val Glu
      210      215      220
Asp Val Arg Pro His His Thr Asp Ala Asn Asn Gln Ser Ala Cys Phe
      225      230      235      240
Glu Ala Pro Asp Gln Lys Thr Leu Ser Thr Pro Gln Glu Glu Arg Ile
      245      250      255
Ser Ala Val Glu Ser Gln Pro Ser Arg Lys Arg Ser Val Ser His Gly
      260      265      270
Ser Asn His Thr Gln Lys Pro Asp Glu Gln Arg Ser Glu Pro Ser Ala
      275      280      285
Gly Ile Pro Lys Val Thr Ser Arg Cys Ile Asp Ser Lys Glu Pro Ile
      290      295      300
Glu Arg Pro Glu Glu Lys Pro Lys Lys Glu Gly Phe Ile Arg Ser Ser
      305      310      315      320
Glu Gly Pro Lys Pro Glu Lys Val Tyr Lys Ser Lys Ser Glu Thr Arg
      325      330      335
Trp Gly Pro Arg Pro Ser Ser Asn Arg Arg Glu Glu Val Asn Asp Arg
      340      345      350
Pro Val Arg Arg Ser Gly Pro Ile Lys Lys Pro Val Leu Arg Asp Met
      355      360      365
Lys Glu Glu Arg Glu Gln Arg Lys Glu Lys Glu Gly Glu Lys Ala Glu
      370      375      380
Lys Val Thr Glu Lys Val Val Val Lys Pro Glu Lys Thr Glu Lys Lys
      385      390      395      400
Asp Leu Pro Pro Pro Pro Pro Pro Gln Pro Pro Ala Pro Ile Gln
      405      410      415
Pro Gln Ser Val Pro Pro Pro Ile Gln Pro Glu Ala Glu Lys Phe Pro
      420      425      430
Ser Thr Glu Thr Ala Thr Leu Ala Gln Lys Pro Ser Gln Asp Thr Glu
      435      440      445
Lys Pro Leu Glu Pro Val Ser Thr Val Gln Val Glu Pro Ala Val Lys
      450      455      460
Thr Val Asn Gln Gln Thr Met Ala Ala Pro Val Val Lys Glu Lys Glu
      465      470      475      480
Leu Gln Lys Lys Glu Arg Lys Gln Glu Lys Glu Lys Glu Leu Glu Arg
      485      490      495
Gln Lys Glu Lys Glu Lys Glu Leu Gln Lys Lys
      500      505

```

&lt;210&gt; 5617

&lt;211&gt; 3480

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5617

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120

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 960  
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 1020  
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 1320  
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 1380  
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 1522

<210> 5616  
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 <212> PRT  
 <213> Homo sapiens

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 20 25 30  
 Gln Gln Gln Gln Gln Gly Val Leu Pro Gln Thr Val Pro Ser Gln Pro  
 35 40 45  
 Ser Ser Ser Thr Val Pro Pro Pro His Arg Pro Leu Tyr Gln Pro  
 50 55 60  
 Met Gln Pro His Pro Gln His Leu Ala Ser Met Gly Phe Asp Pro Arg  
 65 70 75 80  
 Trp Leu Met Met Gln Ser Tyr Met Asp Pro Arg Met Met Ser Gly Arg  
 85 90 95  
 Pro Ala Met Asp Ile Pro Pro Ile His Pro Gly Met Ile Pro Pro Lys  
 100 105 110  
 Pro Leu Met Arg Arg Asp Gln Met Glu Gly Ser Pro Asn Ser Ser Glu  
 115 120 125  
 Ser Phe Glu His Ile Ala Arg Ser Ala Arg Asp His Ala Ile Ser Leu  
 130 135 140  
 Ser Glu Pro Arg Met Leu Trp Gly Ser Asp Pro Tyr Pro His Ala Glu  
 145 150 155 160  
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<211> 1522
<212> DNA
<213> Homo sapiens
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4797

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 720  
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 780  
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 1679

&lt;210&gt; 5614

&lt;211&gt; 242

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5614

Ser	Gln	Phe	Ser	Leu	Ser	Gln	Val	Leu	Val	Asp	Ser	Ala	Glu	Glu	Gly
1			5					10					15		
Ser	Leu	Ala	Ala	Ala	Ala	Glu	Leu	Ala	Ala	Gln	Lys	Arg	Glu	Gln	Arg
		20						25					30		
Leu	Arg	Lys	Phe	Arg	Glu	Leu	His	Leu	Met	Arg	Asn	Glu	Ala	Arg	Lys
		35					40				45				
Leu	Asn	His	Gln	Glu	Val	Val	Glu	Glu	Asp	Lys	Arg	Leu	Lys	Leu	Pro
	50					55				60					
Ala	Asn	Trp	Glu	Ala	Lys	Lys	Ala	Arg	Leu	Glu	Trp	Glu	Leu	Lys	Glu
65					70					75				80	
Glu	Glu	Lys	Lys	Lys	Glu	Cys	Ala	Ala	Arg	Gly	Glu	Asp	Tyr	Glu	Lys

	85		90		95
Glu Ile Phe	Gln Lys Glu Leu Asn	Glu Ser Glu Asn Ser Val	Phe Gln		
	100	105	110		
Ala Val Tyr	Gly Leu Gln Arg Ala	Leu Gln Gly Asp Tyr Lys	Asp Val		
	115	120	125		
Val Asn Met	Lys Glu Ser Ser Arg	Gln Arg Leu Glu Ala Leu	Arg Glu		
	130	135	140		
Ala Ala Ile	Lys Glu Glu Thr Glu Tyr	Met Glu Leu Leu Ala Ala	Glu		
	145	150	155	160	
Lys His Gln	Val Glu Ala Leu Lys Asn	Met Gln His Gln Asn	Gln Ser		
	165	170	175		
Leu Ser Met	Leu Asp Glu Ile Leu Glu	Asp Val Arg Lys Ala Ala	Asp		
	180	185	190		
Arg Leu Glu	Glu Glu Ile Glu Glu His	Ala Phe Asp Asp Asn	Lys Ser		
	195	200	205		
Val Lys Gly	Val Asn Phe Glu Ala Val	Leu Arg Val Glu Glu Glu	Glu		
	210	215	220		
Ala Asn Ser	Lys Gln Asn Ile Thr Lys	Arg Glu Val Glu Asp Asp	Leu		
	225	230	235	240	
Val Leu Ser	Met Leu Ile Asp Ser Gln	Asn Asn Gln Tyr Ile Leu	Thr		
	245	250	255		
Lys Pro Arg	Asp Ser Thr Ile Pro Arg	Ala Asp His His Phe Ile	Lys		
	260	265	270		
Asp Ile Val	Thr Ile Gly Met Leu Ser	Leu Pro Cys Gly Trp Arg	Cys		
	275	280	285		

Thr

&lt;210&gt; 5613

&lt;211&gt; 1679

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5613

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120

ctcagaccct gtgggggtcaa gtcggcggtg gaggcctag gctcagcctg tggggaccgg  
180

cggggactcg gcctgggcag tcctgggaga agctgagccg gctctgctg aagccagttc  
240

tccttgctgc aggtgctggt ggacagcgcg gaggaggggt ccctcgctgc ggcggcggag  
300

ctggccgctc agaagcgga acagagactg cgcaaattcc gggagctgca cctgatgctg  
360

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420

cctgcaaatt gggaagccaa aaaagctcgt ttggagtggg aactaaagga agaggaaaag  
480

aaaaaggaat gtgcggcaag aggagaagac tatgagaaag tgaagttgct ggagatcagt  
540

gcagaagatg cagaaagatg ggagaggaaa aagaagagga aaaaccctga tctgggattt  
600

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 360  
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 420  
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 480  
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 720  
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 780  
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 840  
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 900  
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 1152

<210> 5612

<211> 289

<212> PRT

<213> Homo sapiens

<400> 5612

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Pro	Trp	Ala	Val	Gln	Ala	Val	Glu	His	Glu	Glu	Val	Ala	Gln	Arg	Val
			20					25					30		
Ile	Lys	Leu	His	Arg	Gly	Arg	Gly	Val	Ala	Ala	Met	Gln	Ser	Arg	Gln
			35				40					45			
Trp	Val	Arg	Asp	Ser	Cys	Arg	Lys	Leu	Ser	Gly	Leu	Leu	Arg	Gln	Lys
	50					55					60				
Asn	Ala	Val	Leu	Asn	Lys	Leu	Lys	Thr	Ala	Ile	Gly	Ala	Val	Glu	Lys
65					70				75					80	
Asp	Val	Gly	Leu	Ser	Asp	Glu	Glu	Lys	Leu	Phe	Gln	Val	His	Thr	Phe

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1560  
tcacagaact cctgagcaga agctgagcag ggaagaaatg gtgtgtagtt tcagggtgtc  
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1680  
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1740  
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1843

<210> 5610  
<211> 153  
<212> PRT  
<213> Homo sapiens

<400> 5610  
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Phe Thr Ala Cys Ser Ser Arg Val Gln Met Ala Cys Ile Cys Ala Val  
20 25 30  
Phe Thr Gly Gly Arg Gln Asp His Thr Ser Leu Pro His Trp Ala Cys  
35 40 45  
Leu Leu Val Asp Ser Cys Met Gln Glu Ala Val Met Gly Ser Leu Arg  
50 55 60  
Ile Pro Gln Cys Gly Asn Gly Pro Leu Arg Leu Val Leu Arg Val Pro  
65 70 75 80  
Gly Ala Gln Ser Trp Val Gly Gly Cys Trp Trp Glu Val Arg Asn Lys  
85 90 95  
Phe Trp Leu Pro Ser Gly Gln Leu Pro Thr Ala Leu Thr Trp Glu Val  
100 105 110  
Asp Ala His Arg Gln Asp Ala Leu Gly Tyr Cys Cys Thr Val Leu His  
115 120 125  
Glu Ile Phe Ile Gln Pro Thr Arg Phe Asn Arg Ser Leu Gly Ser Ser  
130 135 140  
Ser Arg Leu Leu Cys Leu Phe Lys His  
145 150

<210> 5611  
<211> 1152  
<212> DNA  
<213> Homo sapiens

<400> 5611  
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tgcaaggaag ccctccggcg ctgcgctccg aggcgggaga cagcgctccc ctccgccct  
120

100

105

&lt;210&gt; 5609

&lt;211&gt; 1843

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5609

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120  
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240  
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300  
gttattgtaa ttctgaatgt actcatcgtg tttctcactt ctacagaagc atcctcagt  
360  
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420  
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900  
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960  
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1320  
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1380

&lt;400&gt; 5606

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Met Thr Arg Ala Leu Leu Thr Ser Leu Val Leu Leu Pro Ala Arg Gln
 1             5             10             15
Ala His Pro Cys Arg Ala Leu Ala Leu Thr Ala Pro Ile Phe Leu Leu
      20             25             30
Leu Phe Pro Ser Ser Glu Cys Gly Trp Phe Ser Leu Leu Leu Ser Ser
      35             40             45
Asp Val Pro Ser Ser Ser Leu Glu Arg Pro Pro Trp Met Thr Glu Glu
      50             55             60
Val Thr Thr Thr Ser Ser Arg Ser Thr Pro Arg Pro Ser Val Ser Pro
      65             70             75             80
Ser Gln Cys Leu Ala Pro Ser Asn Ile Ala Phe Cys Val Tyr His Gln
      85             90             95
Phe Pro Phe Thr Arg
      100

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&lt;210&gt; 5607

&lt;211&gt; 320

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5607

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ggtttggggc gacacgcgga aggccgggtg gagcccatcc atgctgtggt gttgcctcga
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gggaagtgcg tggaccagtg tgtggagacc ctgcagaagc agaccagggt tggcaaggct
180
ggcaccaaca agccccccag gtgccgggga agagggggcca ggcctggggg ccgcccagct
240
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300
caagccgggc ggcctcagca
320

```

&lt;210&gt; 5608

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5608

```

Val His Thr Arg Gly Ile Gly Ser Arg Leu Leu Thr Lys Met Gly Tyr
 1             5             10             15
Glu Phe Gly Lys Gly Leu Gly Arg His Ala Glu Gly Arg Val Glu Pro
      20             25             30
Ile His Ala Val Val Leu Pro Arg Gly Lys Ser Leu Asp Gln Cys Val
      35             40             45
Glu Thr Leu Gln Lys Gln Thr Arg Val Gly Lys Ala Gly Thr Asn Lys
      50             55             60
Pro Pro Arg Cys Arg Gly Arg Gly Ala Arg Pro Gly Gly Arg Pro Ala
      65             70             75             80
Pro Arg Asn Val Phe Asp Phe Leu Asn Glu Lys Leu Gln Gly Gln Ala
      85             90             95
Pro Gly Ala Leu Gln Ala Gly Arg Pro Gln

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<210> 5605
<211> 376
<212> DNA
<213> Homo sapiens
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<210> 5606
<211> 101
<212> PRT
<213> Homo sapiens
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 2070

<210> 5604  
 <211> 560  
 <212> PRT  
 <213> Homo sapiens

<400> 5604  
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 20 25 30  
 His Val Cys Arg Pro Pro Gly Asn Val Ser Gln Val Val Phe His Asn  
 35 40 45  
 His Ser Asn Trp Ser Leu Glu Asp Thr Gly Ala Leu Leu Ser Ser Gly  
 50 55 60  
 Gln Lys Asp Tyr Val Thr Val Gln Leu Gln Asn Gly Glu Ile Trp Glu  
 65 70 75 80  
 Leu Ser Arg Cys Ser Arg Asn Lys Arg Glu Asn Thr Ser Ser Leu Gly  
 85 90 95  
 Tyr Glu Tyr Thr Gly Ser Lys Lys Glu Phe Pro Cys Val Asp Gly Tyr  
 100 105 110  
 Ile Tyr Asp Gln Asn Thr Trp Lys Ser Thr Ala Val Thr Gln Trp Asn  
 115 120 125  
 Leu Val Cys Asp Arg Lys Trp Leu Ala Met Leu Ile Gln Pro Leu Phe  
 130 135 140  
 Met Phe Gly Val Leu Leu Gly Ser Val Thr Phe Gly Tyr Phe Ser Asp  
 145 150 155 160  
 Arg Leu Gly Arg Arg Val Val Leu Trp Ala Thr Ser Ser Ser Met Phe  
 165 170 175  
 Leu Phe Gly Ile Ala Ala Ala Phe Ala Val Asp Tyr Tyr Thr Phe Met  
 180 185 190  
 Ala Ala Arg Phe Phe Leu Ala Met Val Ala Ser Gly Tyr Leu Val Val  
 195 200 205  
 Gly Phe Val Tyr Val Met Glu Phe Ile Gly Met Lys Ser Arg Thr Trp  
 210 215 220  
 Ala Ser Val His Leu His Ser Phe Phe Ala Val Gly Thr Leu Leu Val  
 225 230 235 240  
 Ala Leu Thr Gly Tyr Leu Val Arg Thr Trp Trp Leu Tyr Gln Met Ile  
 245 250 255  
 Leu Ser Thr Val Thr Val Pro Phe Ile Leu Cys Cys Trp Val Leu Pro  
 260 265 270  
 Glu Thr Pro Phe Trp Leu Leu Ser Glu Gly Arg Tyr Glu Glu Ala Gln  
 275 280 285  
 Lys Ile Val Asp Ile Met Ala Lys Trp Asn Arg Ala Ser Ser Cys Lys  
 290 295 300  
 Leu Ser Glu Leu Leu Ser Leu Asp Leu Gln Gly Pro Val Ser Asn Ser  
 305 310 315 320  
 Pro Thr Glu Val Gln Lys His Asn Leu Ser Tyr Leu Phe Tyr Asn Trp  
 325 330 335  
 Ser Ile Thr Lys Arg Thr Leu Thr Val Trp Leu Ile Trp Phe Thr Gly

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<210> 5602  
 <211> 213  
 <212> PRT  
 <213> Homo sapiens

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 Arg Arg Thr Thr Ala Ser Leu Leu Arg Lys Leu Thr Thr Ala Ser Asn  
 35 40 45  
 Gly Gly Val Ile Glu Glu Leu Ser Cys Val Arg Ser Asn Asn Tyr Val  
 50 55 60  
 Gln Glu Pro Glu Cys Arg Arg Asn Leu Val Gln Cys Leu Leu Glu Lys  
 65 70 75 80  
 Gln Gly Thr Pro Val Val Gln Gly Ser Leu Glu Leu Glu Arg Val Met  
 85 90 95  
 Ser Ser Leu Leu Asp Met Gly Phe Ser Asn Ala His Ile Asn Glu Leu  
 100 105 110  
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 115 120 125  
 Ser Glu Phe Ile Leu Leu Gly Leu Asn Pro Glu Pro Val Cys Val Val  
 130 135 140  
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 145 150 155 160  
 Lys Arg Ser Ser Tyr Leu Gln Lys Leu Gly Leu Gly Glu Gly Lys Leu  
 165 170 175  
 Lys Arg Val Leu Tyr Cys Cys Pro Glu Ile Phe Thr Met Arg Gln Gln  
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 195 200 205  
 Val Pro Leu His Ala  
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<210> 5603  
 <211> 2070  
 <212> DNA  
 <213> Homo sapiens

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<210> 5601
<211> 670
<212> DNA
<213> Homo sapiens
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660
cttcacgcgt
670

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Asp Phe Pro Ser Gln Asp Val Phe Thr Val Glu Pro Gln Phe Asp Thr
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Ser Asn His Tyr Thr Ser Ser Glu Ile Arg Val Phe Gly Ala Pro Glu

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&lt;213&gt; Homo sapiens

&lt;400&gt; 5599

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<400> 5594

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&lt;210&gt; 5593

&lt;211&gt; 3078

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5593

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&lt;210&gt; 5592

&lt;211&gt; 580

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&lt;213&gt; Homo sapiens

&lt;400&gt; 5592

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&lt;210&gt; 5587

&lt;211&gt; 853

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5587

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&lt;210&gt; 5588

&lt;211&gt; 204

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5588

Met Ala Pro Glu His Glu Ile Pro Lys Ile Gly Trp Tyr Ser Arg Phe  
 1                      5                      10                      15  
 Ala Arg His Pro Phe Tyr Gly Ser Ala Gly Val Asn Ser Gly Val Met

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385          390          395          400
Glu His Met Ala Gln Gln Asp Pro Gly Leu Pro Phe Leu Phe Trp Phe
          405          410          415
Ser Val Ala Ser Leu Ile Thr Leu Phe His Leu Phe Leu Phe Lys Leu
          420          425          430
Ile Tyr Asn Glu Tyr Cys Gly Pro Gly Ala Lys Pro Leu Phe Arg Ser
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Lys Glu Asp Pro Ser Val
          450

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&lt;210&gt; 5585

&lt;211&gt; 740

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5585

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&lt;210&gt; 5586

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5586

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          20          25          30
Leu Lys Arg Ser Cys Pro Thr Tyr Leu Ser Pro Pro Gln Pro Lys Asp

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&lt;211&gt; 454

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5584

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 Gly Arg Pro His Val Tyr Leu Gln Arg Ile Gln Leu Asn Asn Pro Thr  
 20 25 30  
 Glu Arg Val Ala Ala Leu Gln Thr Val Gly Pro Thr Ala Gly Pro Ala  
 35 40 45  
 Pro Asn Ala Phe Thr Ser Thr Leu Glu Lys Val Gly Asp His Gln Phe  
 50 55 60  
 Leu Leu Tyr Ser Gly Arg Ser Pro Pro Thr Pro Thr Gly Leu Val His  
 65 70 75 80  
 Leu Val Val Val Ala Lys Lys Leu Val Asn Arg Leu Gln Val Ala  
 85 90 95  
 Pro Lys Thr Gln Leu Asp Glu Thr Val Leu Trp Val Val His Val Ser  
 100 105 110  
 Gly Pro Ile Asn Pro Gln Val Leu Lys Ser Lys Ala Ala Lys Glu Leu  
 115 120 125  
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 145 150 155 160  
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 165 170 175  
 Pro Ser Gly Leu Thr Val Asn Leu Thr Leu Tyr Tyr Met Leu Ser Cys  
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 210 215 220  
 Ala Thr Met His Ala Glu Asn Leu Trp Pro Gly Arg Leu Ser Ser Val  
 225 230 235 240  
 Gln Gln Ile Leu Gln Leu Ser Asp Leu Trp Arg Leu Thr Leu Gln Lys  
 245 250 255  
 Arg Gly Cys Lys Gly Leu Val Lys Val Gly Ala Pro Gly Ile Leu Gln  
 260 265 270  
 Gly Met Val Leu Ser Phe Gly Gly Leu Gln Phe Thr Glu Asn His Leu  
 275 280 285  
 Gln Phe Gln Ala Asp Pro Asp Val Leu His Asn Ser Tyr Ala Leu His  
 290 295 300  
 Gly Ile Arg Tyr Lys Asn Asp His Ile Asn Leu Ala Val Leu Arg Met  
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 Pro Arg Ala Ser Pro Thr Tyr Thr Cys Pro Trp Ser Pro Val Ala Ser  
 325 330 335  
 Leu Ser Xaa Ile Tyr Ala Cys Lys Ala Gly Cys Leu Asp Glu Pro Val  
 340 345 350  
 Glu Leu Thr Ser Ala Pro Thr Gly His Thr Phe Ser Val Met Val Thr  
 355 360 365  
 Gln Pro Ile Thr Pro Leu Leu Tyr Ile Ser Thr Asp Leu Thr His Leu  
 370 375 380  
 Gln Asp Leu Arg His Thr Leu His Leu Lys Ala Ile Leu Ala His Asp

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2101

&lt;210&gt; 5584

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Ser Leu Ala Ser Arg Glu Leu Pro Val Ser Ser Trp Gln Val Thr Glu			
	35	40	45
Pro Ser Ser Lys Asn Leu Trp Glu Gln Ile Cys Lys Glu Tyr Glu Ala			
	50	55	60
Glu Gln Pro Pro Phe Pro Glu Gly Tyr Lys Val Lys Gln Glu Pro Val			
65	70	75	80
Ile Thr Val Ala Pro Val Glu Glu Met Leu Phe His Gly Phe Ser Ala			
	85	90	95
Glu His Tyr Phe Pro Val Ser His Phe Thr Met Ile Ser Arg Thr Pro			
	100	105	110
Cys Pro Gln Asp Lys Ser Glu Thr Ile Asn Pro Lys Thr Cys Ser Pro			
	115	120	125
Lys Glu Tyr Leu Glu Thr Phe Ile Phe Pro Val Leu Leu Pro Gly Met			
	130	135	140
Ala Ser Leu Leu His Gln Ala Lys Lys Glu Lys Cys Phe Glu Val Ser			
145	150	155	160
Cys Leu Ala Gly Phe Leu Tyr Phe Glu Ile Leu Asn His Ser Leu Leu			
	165	170	175
Ser Asp Asp Ser Ser Leu Ser Trp Tyr His Gln Val Val Leu Gln Met			
	180	185	190
Thr Pro Ser Gly Gly Lys Ala Cys Val Trp Gly His Leu Pro Ser Ser			
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Ser His Thr Ile			
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&lt;210&gt; 5583

&lt;211&gt; 2101

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5583

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&lt;210&gt; 5580

&lt;211&gt; 283

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5580

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		20						25					30		
Ser	Gly	Pro	Ser	Gln	Thr	Thr	Ile	His	Leu	Leu	Pro	Thr	Ala	Pro	Thr
	35					40						45			
Thr	Val	Asn	Val	Thr	His	Arg	Pro	Val	Thr	Gln	Val	Thr	Thr	Arg	Leu
	50					55					60				
Pro	Val	Pro	Arg	Ala	Pro	Ala	Asn	His	Gln	Val	Val	Tyr	Thr	Thr	Leu
65					70					75					80
Pro	Ala	Pro	Pro	Ala	Gln	Ala	Pro	Leu	Arg	Gly	Thr	Val	Met	Gln	Ala
				85					90					95	
Pro	Ala	Val	Arg	Gln	Val	Asn	Pro	Gln	Asn	Ser	Val	Thr	Val	Arg	Val
			100					105					110		
Pro	Gln	Thr	Thr	Thr	Tyr	Val	Val	Asn	Asn	Gly	Leu	Thr	Leu	Gly	Ser
	115					120						125			
Thr	Gly	Pro	Gln	Leu	Thr	Val	His	His	Arg	Pro	Pro	Gln	Val	His	Thr
	130					135						140			
Glu	Pro	Pro	Arg	Pro	Val	His	Pro	Ala	Pro	Leu	Pro	Glu	Ala	Pro	Gln
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 <212> PRT  
 <213> Homo sapiens

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 Xaa Glu Ser Leu Pro Glu Gln Leu Pro Val Ala Asp Met Arg Ala Leu  
 35 40 45  
 Leu Thr Gly Lys Asp Cys Pro His Val Arg Glu Lys Gly Ser Gly Lys  
 50 55 60  
 Gln Asn Lys Asp Leu Tyr Glu Leu Ala Phe Ser Ile Ser Tyr Asp Arg  
 65 70 75 80  
 Gly Glu Glu Glu Ala Tyr Leu Asn Phe Ile Ala Pro Ser Lys Arg Glu  
 85 90 95  
 Phe Tyr Leu Trp Thr Asp Gly Leu Ser Ala Leu Leu Gly Ser Pro Met  
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 Gly Ser Glu Gln Thr Arg Leu Asp Leu Glu Gln Leu Leu Thr Met Glu  
 115 120 125  
 Thr Lys Leu Arg Leu Leu Glu Leu Glu Asn Val Pro Ile Pro Glu Arg  
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 <213> Homo sapiens

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<211> 367

<212> PRT

<213> Homo sapiens

<400> 5576

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		20						25					30		
Gln	Ala	Leu	Thr	Gly	Asn	Glu	Gly	Arg	Val	Ser	Val	Glu	Asn	Ile	Lys
		35					40					45			
Gln	Leu	Leu	Gln	Cys	Leu	Val	Pro	Gly	Ser	Thr	Thr	Leu	His	Ser	Ala
		50				55					60				
Glu	Ile	Leu	Ala	Glu	Ile	Ala	Arg	Ile	Leu	Arg	Pro	Gly	Gly	Cys	Leu
65				70					75					80	
Phe	Leu	Lys	Glu	Pro	Val	Glu	Thr	Ala	Val	Asp	Asn	Asn	Ser	Lys	Val
			85					90					95		
Lys	Thr	Ala	Ser	Lys	Leu	Cys	Ser	Ala	Leu	Thr	Leu	Ser	Gly	Leu	Val
		100					105					110			
Glu	Val	Lys	Glu	Leu	Gln	Arg	Glu	Pro	Leu	Thr	Pro	Glu	Glu	Val	Gln
		115					120					125			
Ser	Val	Arg	Glu	His	Leu	Gly	His	Glu	Ser	Asp	Asn	Leu	Leu	Phe	Val
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Gln	Ile	Thr	Gly	Lys	Lys	Pro	Asn	Phe	Glu	Val	Gly	Ser	Ser	Arg	Gln
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<211> 312  
 <212> PRT  
 <213> Homo sapiens

<400> 5574

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 20          25          30
Ala Glu Ile Glu Glu Ala Leu Gln Ala Gly Leu Ala Pro Leu Gly Glu
 35          40          45
Tyr Arg Leu Leu Gly Arg Met Phe Arg Arg Asp Glu Asn Arg Lys Val
 50          55          60
Ala Leu Val Gly Leu Thr Ala Glu Thr Ser His Ala Leu Val Pro Lys
 65          70          75          80
Glu Ile Pro Gly Lys Gly Gly Ile Trp Arg Val Ile Phe Lys Pro Pro
 85          90          95
Asp Pro Asp Asn Thr Phe Leu Ser Arg Leu Asn Glu Phe Leu Ala Gly
100          105          110
Glu Gly Met Thr Val Gly Glu Leu Ser Arg Ala Leu Gly His Glu Asn
115          120          125
Gly Ser Leu Asp Pro Glu Gln Gly Met Ile Pro Glu Met Trp Ala Pro
130          135          140
Met Leu Ala Gln Ala Leu Glu Ala Leu Gln Pro Ala Leu Gln Cys Leu
145          150          155          160
Lys Tyr Lys Lys Leu Arg Val Phe Ser Gly Arg Glu Ser Pro Glu Pro
165          170          175
Gly Glu Glu Glu Phe Gly Arg Trp Met Phe His Thr Thr Gln Met Ile
180          185          190
Lys Ala Trp Gln Val Pro Asp Val Glu Lys Arg Arg Arg Leu Leu Glu
195          200          205
Ser Leu Arg Gly Pro Ala Leu Asp Val Ile Arg Val Leu Lys Ile Asn
210          215          220
Asn Pro Leu Ile Thr Val Asp Glu Cys Leu Gln Ala Leu Glu Glu Val
225          230          235          240
Phe Gly Val Thr Asp Asn Pro Arg Glu Leu Gln Val Lys Tyr Leu Thr
245          250          255
Thr Tyr Gln Lys Asp Glu Glu Lys Leu Ser Ala Tyr Val Leu Arg Leu
260          265          270
Glu Pro Leu Leu Gln Lys Leu Val Gln Arg Gly Ala Ile Glu Arg Asp
275          280          285
Ala Val Asn Gln Ala Arg Leu Asp Gln Val Ile Ala Gly Ala Val His
290          295          300
Lys Thr Ile Arg Arg Glu Leu Asn
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<210> 5575  
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 <213> Homo sapiens

<400> 5575

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130

135

&lt;210&gt; 5573

&lt;211&gt; 1279

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5573

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120  
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180  
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240  
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1279

&lt;210&gt; 5574

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	115		120		125										
Gly	Thr	Leu	Ala	Lys	Met	Gln	Cys	Leu	Pro	Asn	Ser	His	Ile	Ser	Phe
	130		135		140										
Asn	Gln	Gly	Ala	Ile	Pro	Ala	Trp	Lys	Ser	Pro	Ser	Cys	Ser	Cys	Trp
145			150		155									160	
Gln	Val	Gln	Val	Pro	Val	Cys	Asp	Gly							
			165												

&lt;210&gt; 5571

&lt;211&gt; 405

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5571

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240
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405

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&lt;210&gt; 5572

&lt;211&gt; 135

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5572

Asn	Gln	Lys	Val	Asp	Leu	Phe	Ser	Leu	Gly	Ile	Ile	Phe	Phe	Glu	Met
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Ser	Tyr	His	Pro	Met	Val	Thr	Ala	Ser	Glu	Arg	Ile	Phe	Val	Leu	Asn
			20					25					30		
Gln	Leu	Arg	Asp	Pro	Thr	Ser	Pro	Lys	Phe	Pro	Glu	Asp	Phe	Asp	Asp
		35					40					45			
Gly	Glu	His	Ala	Lys	Gln	Lys	Ser	Val	Ile	Ser	Trp	Leu	Leu	Asn	His
	50				55					60					
Asp	Pro	Ala	Lys	Arg	Pro	Thr	Ala	Thr	Glu	Leu	Leu	Lys	Ser	Glu	Leu
65				70					75					80	
Leu	Pro	Pro	Pro	Gln	Met	Glu	Glu	Ser	Glu	Leu	His	Glu	Val	Leu	His
			85					90					95		
His	Thr	Leu	Thr	Asn	Val	Asp	Gly	Lys	Ala	Tyr	Arg	Thr	Met	Met	Ala
		100					105					110			
Gln	Ile	Phe	Ser	Gln	Arg	Leu	Ala	Gly	Ala	Gly	Gly	Gly	Gly	Tyr	Arg
	115				120							125			
Ser	Arg	Leu	Gly	Val	Pro	Arg									

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5569

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780
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&lt;210&gt; 5570

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5570

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Thr Ala Arg Leu Gly Gln Ser Lys Ser Trp Glu Val Thr Leu Arg Leu
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Leu Val Gln Ala Val Glu Tyr Asn Ile Phe Glu Gly Met Glu Cys His
20     25     30
Gly Ser Pro Leu Val Val Ile Ser Gln Gly Lys Ile Val Phe Glu Asp
35     40     45
Gly Asn Ile Asn Val Asn Lys Gly Met Gly Arg Phe Ile Pro Arg Lys
50     55     60
Ala Phe Pro Glu His Ser Thr Trp Leu Glu Leu His Asn His Gly
65     70     75     80
Arg Arg His Val Cys Glu Ala Ser Trp Gly Cys Thr Ala Asp Pro Leu
85     90     95
Leu Ser Pro Leu Ala Leu Ser Ala Ala Phe Met Trp Leu Ser Pro Ser

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 968

&lt;210&gt; 5568

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5568

Met	Gln	Ser	Val	Asn	Cys	Val	Asn	Cys	Ile	Gly	His	Ser	Asn	Leu	Thr
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Ala	Ser	Ile	Pro	Ala	Ala	Ser	Leu	Phe	Leu	Ile	Cys	Ile	His	Ser	Val
			20					25					30		
His	Arg	Ser	Ile	His	Leu	Ala	Pro	Leu	Gln	Ile	Trp	Val	Leu	Cys	Lys
		35					40					45			
Ile	Leu	Pro	Trp	Asp	Thr	Glu	Gly	Lys	Ser	Asp	Thr	Ala	Leu	Leu	Ser
		50				55					60				
Ser	Ser	Gln	Thr	Leu	Arg	Tyr	Pro	Asp	Thr	Thr	Ala	Leu	Ile	Val	Ser
65					70				75					80	
Glu	Asn	Thr	Ala	Thr	Ser	Ala	Gly	Lys	Tyr	Gln	Arg	Cys	Phe	Thr	Arg
				85				90						95	
Tyr	Met	Tyr	Gln	Ile	Leu	Lys	Ala	Ala	Val	Pro	Lys	Tyr	His	Lys	Leu
			100				105						110		
His	Gly	Leu	Lys	Gln	Gln	Lys	Phe	Ile	Pro	Ser	Gln	Ser	Trp	Arg	Pro
		115				120						125			
Asp	Val														

&lt;210&gt; 5569

&lt;211&gt; 876

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 <211> 472  
 <212> DNA  
 <213> Homo sapiens

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 240  
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 360  
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 <212> PRT  
 <213> Homo sapiens

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 Ala Met Trp Arg Val Glu Ile Thr Gln Phe Phe Gly Asp Arg Val Ser  
 20 25 30  
 Leu Pro Pro Arg Leu Glu Ser Gly Gly Ala Ile Thr Ala His Ser Ser  
 35 40 45  
 Leu Asp Leu Gln Gly Ser Ser Asp Pro Pro Ala Ser Ala Ser Arg Ala  
 50 55 60  
 Ala Gly Ser Thr Gly Ala Tyr His Ala Trp Leu Phe  
 65 70 75

<210> 5567  
 <211> 968  
 <212> DNA  
 <213> Homo sapiens

<400> 5567  
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 240

4751

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<210> 5564

<211> 683

<212> PRT

<213> Homo sapiens

<400> 5564

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 35 40 45  
 Leu Ser Asn Arg Arg Leu Lys His Phe Pro Arg Gly Ala Ala Arg Ser  
 50 55 60  
 Tyr Asp Leu Ser Asp Ile Thr Gln Ala Asp Leu Ser Arg Asn Arg Phe  
 65 70 75 80  
 Pro Glu Val Pro Glu Ala Ala Cys Gln Leu Val Ser Leu Glu Gly Leu  
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 Ser Leu Tyr His Asn Cys Leu Arg Cys Leu Asn Pro Ala Leu Gly Asn  
 100 105 110  
 Leu Thr Ala Leu Thr Tyr Leu Asn Leu Ser Arg Asn Gln Leu Ser Leu  
 115 120 125  
 Leu Pro Pro Tyr Ile Cys Gln Leu Pro Leu Arg Val Leu Ile Val Ser  
 130 135 140  
 Asn Asn Lys Leu Gly Ala Leu Pro Pro Asp Ile Gly Thr Leu Gly Ser  
 145 150 155 160  
 Leu Arg Gln Leu Asp Val Ser Ser Asn Glu Leu Gln Ser Leu Pro Ser  
 165 170 175  
 Glu Leu Cys Gly Leu Ser Ser Leu Arg Asp Leu Asn Val Arg Arg Asn  
 180 185 190  
 Gln Leu Ser Thr Leu Pro Glu Glu Leu Gly Asp Leu Pro Leu Val Arg  
 195 200 205  
 Leu Asp Phe Ser Cys Asn Arg Val Ser Arg Ile Pro Val Ser Phe Cys  
 210 215 220  
 Arg Leu Arg His Leu Gln Val Ile Leu Leu Asp Ser Asn Pro Leu Gln  
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 Ser Pro Pro Ala Gln Val Cys Leu Lys Gly Lys Leu His Ile Phe Lys  
 245 250 255  
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<211> 2878
<212> DNA
<213> Homo sapiens
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840

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<210> 5562

<211> 372

<212> PRT

<213> Homo sapiens

<400> 5562

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Arg	Ile	Leu	Lys	Arg	Ile	Thr	Val	Pro	Arg	Gly	Ala	Asp	Glu	Gln	Arg
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Ile	Cys	Val	Asp	Cys	Ala	Met	Glu	Ser	Ser	Arg	Asn	Ser	Ser	Met	Leu
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Cys Ala Ala Leu Trp Gly Val Asn Leu Leu Val Gly Thr Glu Ser Gly				
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Leu Met Leu Leu Asp Arg Ser Gly Gln Gly Lys Val Tyr Pro Leu Ile				
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Asn Arg Arg Arg Phe Gln Gln Met Asp Val Leu Glu Gly Leu Asn Val				880
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Ser Trp Leu Arg Asn Lys Ile Leu His Asn Asp Pro Glu Val Glu Lys				
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Lys Gln Gly Trp Thr Thr Val Gly Asp Leu Glu Gly Cys Val His Tyr				
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Lys Val Val Lys Tyr Glu Arg Ile Lys Phe Leu Val Ile Ala Leu Lys				
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Cys Ala Gly Phe His Ala Val Asp Val Asp Ser Gly Ser Val Tyr Asp				
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Ile Tyr Leu Pro Thr His Val Arg Lys Asn Pro His Ser Met Ile Gln				
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Cys Ser Ile Lys Pro His Ala Ile Ile Ile Leu Pro Asn Thr Asp Gly				
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&lt;210&gt; 5561

&lt;211&gt; 2089

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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Gln Lys Glu Gln Arg Arg Arg Leu Glu Glu Gln Gln Arg Arg Glu Arg
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Glu Ala Arg Arg Gln Gln Glu Arg Glu Gln Arg Arg Arg Glu Gln Glu
      420      425      430
Glu Lys Arg Arg Leu Glu Glu Leu Glu Arg Arg Arg Lys Glu Glu Glu
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Glu Arg Arg Arg Ala Glu Glu Glu Lys Arg Arg Val Glu Arg Glu Gln
      450      455      460
Glu Tyr Ile Arg Arg Gln Leu Glu Glu Glu Gln Arg His Leu Glu Val
      465      470      475      480
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      530      535      540
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Pro Gly Ser Gln Ser Gly Ser Gly Glu Arg Phe Arg Val Arg Ser Ser
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Ser Lys Ser Glu Gly Ser Pro Ser Gln Arg Leu Glu Asn Ala Val Lys
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Lys Pro Glu Asp Lys Lys Glu Val Phe Arg Pro Leu Lys Pro Ala Gly
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<210> 5560

<211> 1165

<212> PRT

<213> Homo sapiens

<400> 5560

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Ile	Thr	Asp	Leu	Val	Lys	Asn	Thr	Lys	Gly	Asn	Thr	Leu	Lys	Glu	Asp
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&lt;210&gt; 5559

&lt;211&gt; 3866

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5559

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 1860  
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 1920  
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 1970

&lt;210&gt; 5558

&lt;211&gt; 360

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5558

Met	Asp	Asp	Phe	Thr	Pro	Pro	Gly	Ser	Gly	Ala	Cys	Lys	Phe	Ile	Gly
1				5					10					15	
Ser	Leu	His	Ser	Tyr	Ser	Phe	Ser	Ser	Lys	His	Thr	Arg	Glu	Arg	Pro
		20						25					30		
Ser	Val	Pro	Arg	Glu	Pro	Ile	Asp	Arg	Lys	Arg	Leu	Lys	Lys	Asp	Val
		35					40					45			
Glu	Pro	Ser	Cys	Ser	Gly	Ser	Ser	Leu	Gly	Pro	Asp	Lys	Gly	Leu	Ala
	50					55					60				
Gln	Ser	Pro	Pro	Ser	Ser	Ser	Leu	Thr	Ala	Thr	Arg	Gln	Lys	Pro	Ser
65				70					75					80	
Gln	Ser	Pro	Ser	Ala	Pro	Pro	Ala	Asp	Val	Thr	Pro	Lys	Pro	Ala	Thr
			85					90						95	
Glu	Ala	Val	Gln	Ser	Glu	His	Ser	Asp	Ala	Ser	Pro	Met	Ser	Ile	Asn
		100					105						110		
Glu	Val	Ile	Leu	Ser	Ala	Ser	Gly	Ala	Cys	Lys	Leu	Ile	Asp	Ser	Leu
		115					120						125		
His	Ser	Tyr	Cys	Phe	Ser	Ser	Arg	Gln	Asn	Lys	Ser	Gln	Val	Cys	Cys

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180
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300
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360
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420
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960
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1020
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1080

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274

<210> 5554

<211> 90

<212> PRT

<213> Homo sapiens

<400> 5554

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Phe Leu Ala Ile Ser Glu Glu Val Ala Phe Val Pro Glu Lys Arg Thr  
20 25 30  
Pro Gln Pro His Pro Thr Ala Ser Pro Asp Pro Lys Val Arg Ile Thr  
35 40 45  
Gly Pro Ala Thr Ala Pro Ala Val Val Leu Ser His Tyr Arg Gly Cys  
50 55 60  
Tyr Phe Pro Ser Gln Cys Pro Trp Gln Pro Trp Lys Pro Met Lys Gln  
65 70 75 80  
Ala Leu Thr Gln Glu Ser Leu Cys Ile Phe  
85 90

<210> 5555

<211> 414

<212> DNA

<213> Homo sapiens

<400> 5555

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120  
cacagggctg tgattctaga agggacagct gtgagggggc gggacaggct aagctggagg  
180  
actcaccaga cttgcggggg tcaacacgct ccagatgtct cctagacctc tcacactcag  
240  
cacatccaaa cctgaacca gcacctggcc ccacacctgt cccctggcta gagacggggg  
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<210> 5556

<211> 115

<212> PRT

<213> Homo sapiens

<400> 5556

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20 25 30  
Glu Ser Gln Gly Cys Asp Ser Arg Arg Asp Ser Cys Glu Gly Pro Gly

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 1320  
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 1380  
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 1440  
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 1500  
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 1680  
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 1689

<210> 5552

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5552

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Ser	Val	Leu	Ser	Arg	Leu	Ser	Leu	Phe	Pro	His	Pro	His	Ile	His	Glu
		20					25					30			
Tyr	Leu	Leu	Asp	Pro	Tyr	Val	Asn	Leu	Ala	Pro	Gly	Cys	Arg	Ser	Leu
	35					40					45				
Phe	Ser	Val	Ile	Val	Arg	Val	Val	Gly	Asp	Leu	Met	Leu	Arg	Ile	Gln
	50				55					60					
Arg	Ile	Gln	Asp	Phe	Thr	Pro	Lys	Leu	Leu	Leu	Val	Arg	Lys	Arg	Leu
65			70					75			80				
Leu	Gly	Leu	Glu	Pro	Glu	Gly	Pro	Ile	Ser	Asp	Leu	Glu	Pro	Val	Glu
			85				90							95	
Ala	Leu	Thr	Val	Ser	Ser	Ile	Cys								
			100												

<210> 5553

<211> 274

<212> DNA

<213> Homo sapiens

<400> 5553

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 120  
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 180  
 actacagagg ctgctatttc cccagccagt gtccttgcca gccttggaac ccaatgaagc  
 240

195	200	205
Leu Leu Glu Ala Phe His Asn Gln Gly Pro Val Ile Lys Arg Lys His		
210	215	220
Asp Leu His Lys Met Ala Glu Ala Asn Arg Ala Leu Ala His Tyr Arg		
225	230	235
Trp Trp		240

&lt;210&gt; 5551

&lt;211&gt; 1689

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5551

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240
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accatgtttt aacacataaa gtgtcacaaat gacatgcata tttgatttac tacataaccc
360
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540
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660
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1080
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1200

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 1500  
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 tggcgttgtc ttccagccgg ccgcccggaa ctcaatgac tccagcagca gcagctggca  
 1860  
 gggcc  
 1865

&lt;210&gt; 5550

&lt;211&gt; 242

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5550

Met	Val	Ala	Pro	Ala	Val	Lys	Val	Ala	Arg	Gly	Trp	Ser	Gly	Leu	Ala
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Leu	Gly	Val	Arg	Arg	Ala	Val	Leu	Gln	Leu	Pro	Gly	Leu	Thr	Gln	Val
		20						25					30		
Arg	Trp	Ser	Arg	Tyr	Ser	Pro	Glu	Phe	Lys	Asp	Pro	Leu	Ile	Asp	Lys
		35					40					45			
Glu	Tyr	Tyr	Arg	Lys	Pro	Val	Glu	Glu	Leu	Thr	Glu	Glu	Glu	Lys	Tyr
	50					55				60					
Val	Arg	Glu	Leu	Lys	Lys	Thr	Gln	Leu	Ile	Lys	Ala	Ala	Pro	Ala	Gly
65				70					75					80	
Lys	Thr	Ser	Ser	Val	Phe	Glu	Asp	Pro	Val	Ile	Ser	Lys	Phe	Thr	Asn
			85					90					95		
Met	Met	Met	Ile	Gly	Gly	Asn	Lys	Val	Leu	Ala	Arg	Ser	Leu	Met	Ile
		100				105						110			
Gln	Thr	Leu	Glu	Ala	Val	Lys	Arg	Lys	Gln	Phe	Glu	Lys	Tyr	His	Ala
	115					120					125				
Ala	Ser	Ala	Glu	Glu	Gln	Ala	Thr	Ile	Glu	Arg	Asn	Pro	Tyr	Thr	Ile
	130				135					140					
Phe	His	Gln	Ala	Leu	Lys	Asn	Cys	Glu	Pro	Met	Ile	Gly	Leu	Val	Pro
145				150					155					160	
Ile	Leu	Lys	Gly	Gly	Arg	Phe	Tyr	Gln	Val	Pro	Val	Pro	Leu	Pro	Asp
			165					170					175		
Arg	Arg	Arg	Arg	Phe	Leu	Ala	Met	Lys	Trp	Met	Ile	Thr	Glu	Cys	Arg
		180					185					190			
Asp	Lys	Lys	His	Gln	Arg	Thr	Leu	Met	Pro	Glu	Lys	Leu	Ser	His	Lys

130	135	140
Leu Phe Tyr Thr Gly Lys Gln Ser Tyr Tyr Ser	Leu Met His Asp Val	
145	150	155
Xaa Met Glu Cys Tyr Ser Ile		160
	165	

&lt;210&gt; 5549

&lt;211&gt; 1865

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5549

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540

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720

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780

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840

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900

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 1391

&lt;210&gt; 5548

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5548

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 20 25 30  
 Leu Gln Thr Asn Val Arg Ser Gln Ile Leu Arg Leu Arg His Thr Ala  
 35 40 45  
 Phe Val Ile Pro Lys Lys Asn Val Pro Thr Ser Lys Arg Glu Thr Tyr  
 50 55 60  
 Thr Glu Asp Phe Ile Lys Lys Gln Ile Glu Glu Phe Asn Ile Gly Lys  
 65 70 75 80  
 Arg His Leu Ala Asn Met Met Gly Glu Asp Pro Glu Thr Phe Thr Gln  
 85 90 95  
 Glu Asp Ile Asp Arg Ala Ile Ala Tyr Leu Phe Pro Ser Gly Leu Phe  
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 Glu Lys Arg Ala Arg Pro Val Met Lys His Pro Glu Gln Ile Phe Pro  
 115 120 125  
 Arg Gln Arg Ala Ile Gln Trp Gly Glu Asp Gly Arg Pro Phe His Tyr

<211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 5546

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Ala Ile Ile Leu Ala Gln Lys Asn Met Leu Asp Arg Phe Glu Lys Thr
           35           40           45
Asn Glu Met Leu Leu Asn Phe Asn Asn Leu Ser Ser Ala Arg Leu Gln
 50           55           60
Gln Met Ser Glu Arg Phe Leu His His Thr Arg Thr Leu Val Glu Met
65           70           75           80
Lys Arg Asp Leu Asp Ser Ile Phe Arg Arg Ile Arg Thr Leu Lys Gly
           85           90           95
Lys Leu Ala Arg Gln His Pro Glu Ala Phe Ser His Ile Pro Glu Ala
           100          105          110
Ser Phe Leu Glu Glu Glu Asp Glu Asp Pro Ile Pro Pro Ser Thr Thr
           115          120          125
Thr Thr Ile Ala Thr Ser Glu Gln Ser Thr Gly Ser Cys Asp Thr Ser
           130          135          140
Pro Asp Thr Val Ser Pro Ser Leu Ser Pro Gly Phe Glu Asp Leu Ser
145          150          155          160
His Val Gln Pro Gly Ser Pro Ala Ile Asn Gly Arg Ser Gln Thr Asp
           165          170          175
Asp Glu Glu Met Thr Gly Glu
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<210> 5547  
 <211> 1391  
 <212> DNA  
 <213> Homo sapiens

<400> 5547

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120
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540

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&lt;210&gt; 5546

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&lt;211&gt; 1932

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5545.

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&lt;210&gt; 5544

&lt;211&gt; 1141

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5544

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&lt;210&gt; 5542

&lt;211&gt; 315

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5542

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Glu	Thr	Ser	Arg	Lys	Asn	Glu	Glu	Val	Met	Thr	His	Ser	Gly	Leu	Trp
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Arg	Thr	Cys	Cys	Leu	Glu	Gly	Ala	Phe	Arg	Gly	Val	Cys	Lys	Lys	Ile
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Asp	His	Phe	Pro	Glu	Asp	Ala	Asp	Tyr	Glu	Gln	Asp	Thr	Ala	Glu	Tyr
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370

375

&lt;210&gt; 5541

&lt;211&gt; 1854

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5541

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His Ser Ala Lys Val His Ser Val Ala Trp Ser Cys Asp Gly Arg Arg
 85           90           95
Leu Ala Ser Gly Ser Phe Asp Lys Thr Ala Ser Val Phe Leu Leu Glu
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Asn Pro Val Val Met Lys Asp Gly Lys Trp Val Val Gln Lys Tyr Ile		95
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Glu Arg Pro Leu Leu Ile Phe Gly Thr Lys Phe Asp Leu Arg Gln Trp		110
	115	120
Phe Leu Val Thr Asp Trp Asn Pro Leu Thr Val Trp Phe Tyr Arg Asp		125
	130	135
Ser Tyr Ile Arg Phe Ser Thr Gln Pro Phe Ser Leu Lys Asn Leu Asp		140
145	150	155
Asn Ser Val His Leu Cys Asn Asn Ser Ile Gln Lys His Leu Glu Asn		160
	165	170
Ser Cys His Arg His Pro Leu Leu Pro Pro Asp Asn Met Trp Ser Ser		175
	180	185
Gln Arg Phe Gln Ala His Leu Gln Glu Met Gly Ala Pro Asn Ala Trp		190
	195	200
Ser Thr Ile Ile Val Pro Gly Met Lys Asp Ala Val Ile His Ala Leu		205
	210	215
Gln Thr Ser Gln Asp Thr Val Gln Cys Arg Lys Ala Ser Phe Glu Leu		220
225	230	235
Tyr Gly Ala Asp Phe Val Phe Gly Glu Asp Phe Gln Pro Trp Leu Ile		240
	245	250
Glu Ile Asn Ala Ser Pro Thr Met Ala Pro Ser Thr Ala Val Thr Ala		255
	260	265
Arg Leu Cys Ala Gly Val Gln Ala Asp Thr Leu Arg Val Val Ile Asp		270
	275	280
Arg Arg Leu Asp Arg Asn Cys Asp Thr Gly Ala Phe Glu Leu Ile Tyr		285
	290	295
Lys Gln Pro Val Thr Thr Ser Pro Ala Ser Thr Pro Arg Pro Ser Cys		300
305	310	315
Leu Leu Pro Met Tyr Ser Asp Thr Arg Ala Arg Ser Ser Asp Asp Ser		320
	325	330
Thr Ala Ser Trp Trp Ala Leu Arg Pro Cys Arg Pro Gln Ala Arg Pro		335
	340	345
		350

&lt;210&gt; 5539

&lt;211&gt; 1887

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5539

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300

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&lt;210&gt; 5538

&lt;211&gt; 352

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5538

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 Ala Glu Leu Arg His Leu Asp Thr Gln Val Gln Arg Cys Glu Asp Ile  
 35 40 45  
 Leu Gln Gln Leu Gln Ala Val Val Pro Gln Ile Asp Met Glu Gly Asp

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&lt;213&gt; Homo sapiens

&lt;400&gt; 5536

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 50      55      60
Glu Leu Leu Ala Gly Gln Lys Lys Ser Ser Pro Phe Trp Thr Phe Glu
 65      70      75      80
Tyr Tyr Gln Thr Phe Phe Asp Val Asp Thr Tyr Gln Val Phe Asp Arg
 85      90      95
Ile Lys Gly Ser Leu Leu Pro Ile Pro Gly Lys Asn Phe Val Arg Leu
100      105      110
Tyr Ile Arg Ser Asn Pro Asp Leu Tyr Gly Pro Phe Trp Ile Cys Ala
115      120      125
Thr Leu Val Phe Ala Ile Ala Ile Ser Gly Asn Leu Ser Asn Phe Leu
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Ile His Leu Gly Glu Lys Thr Tyr His Tyr Val Pro Glu Phe Arg Lys
145      150      155      160
Val Ser Ile Ala Ala Thr Ile Ile Tyr Ala Tyr Ala Trp Leu Val Pro
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&lt;210&gt; 5537

&lt;211&gt; 2881

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5537

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1887

&lt;210&gt; 5536

&lt;211&gt; 306

&lt;212&gt; PRT

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<210> 5534

<211> 168

<212> PRT

<213> Homo sapiens

<400> 5534

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		20					25					30			
Tyr	Arg	Arg	Gly	Leu	Ser	Lys	Tyr	Glu	Ser	Ile	Asp	Glu	Asp	Glu	Leu
		35				40					45				
Leu	Ala	Ser	Leu	Ser	Ala	Glu	Glu	Leu	Lys	Glu	Leu	Glu	Arg	Glu	Leu
	50				55			60							
Glu	Asp	Ile	Glu	Pro	Asp	Arg	Asn	Leu	Pro	Val	Gly	Leu	Arg	Gln	Lys
65				70				75				80			
Ser	Leu	Thr	Glu	Lys	Thr	Pro	Thr	Gly	Thr	Phe	Ser	Arg	Glu	Ala	Leu
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Met	Ala	Tyr	Trp	Glu	Lys	Glu	Ser	Gln	Lys	Leu	Leu	Glu	Lys	Glu	Arg
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Leu	Gly	Glu	Cys	Gly	Lys	Val	Ala	Glu	Asp	Lys	Glu	Glu	Ser	Glu	Glu
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Glu	Leu	Ile	Phe	Thr	Glu	Ser	Asn	Ser	Glu	Val	Ser	Glu	Glu	Val	Tyr
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Thr	Glu	Glu	Glu	Glu	Glu	Glu	Ser	Gln	Glu	Glu	Glu	Glu	Glu	Glu	Asp
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<210> 5535

<211> 1887

<212> DNA

<213> Homo sapiens

<400> 5535

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 Tyr Ser Ala Gly Arg Gly Ile Tyr Ser Arg Tyr His Glu Gly Lys Gly  
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 485 490 495  
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 Phe Gln Gly Arg Pro Ile Thr Pro Val Tyr Thr Val Ala Pro Asn Val  
 515 520 525  
 Gln Arg Ile Pro Thr Ala Gly Ile Tyr Gly Ala Ser Tyr Val Pro Phe  
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 545 550 555 560  
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 <213> Homo sapiens

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<211> 593

<212> PRT

<213> Homo sapiens

<400> 5532

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Ala	Ala	Leu	Ala	Leu	Met	Glu	Arg	Thr	Gly	Tyr	Ser	Met	Val	Gln	
		35				40					45				
Glu	Asn	Gly	Gln	Arg	Lys	Tyr	Gly	Gly	Pro	Pro	Pro	Gly	Trp	Glu	Gly
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Asp	Val	Tyr	Glu	Asp	Glu	Leu	Val	Pro	Val	Phe	Glu	Ala	Val	Gly	Arg
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Cys	Val	Glu	Arg	Val	Lys	Lys	Ile	Arg	Asp	Tyr	Ala	Phe	Val	His	Phe
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Lys	Glu	Gln	Tyr	Ser	Arg	Tyr	Gln	Lys	Ala	Ala	Arg	Gly	Gly	Gly	Ala
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Ala	Glu	Ala	Ala	Gln	Gln	Pro	Ser	Tyr	Val	Tyr	Ser	Cys	Asp	Pro	Tyr

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<211> 3056

<212> DNA

<213> Homo sapiens

<400> 5531

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&lt;210&gt; 5530

&lt;211&gt; 603

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5530

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			20					25					30		
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	35						40					45			
Arg	Leu	Leu	Ser	Cys	Pro	Gly	Thr	Val	Ala	Lys	Asp	Leu	Arg	Arg	Asp
	50					55					60				
Glu	Gln	Pro	Ser	Gly	Ser	Val	Glu	Thr	Gly	Phe	Glu	Asp	Lys	Ile	Pro
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Lys	Arg	Arg	Phe	Ser	Glu	Met	Gln	Asn	Glu	Arg	Arg	Glu	Gln	Ala	Gln
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Arg	Thr	Val	Leu	Ile	His	Cys	Pro	Glu	Lys	Ile	Ser	Glu	Asn	Lys	Phe
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Leu	Lys	Tyr	Leu	Ser	Gln	Phe	Gly	Pro	Ile	Asn	Asn	His	Phe	Phe	Tyr
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Glu	Ser	Phe	Gly	Leu	Tyr	Ala	Val	Val	Glu	Phe	Cys	Gln	Lys	Glu	Ser
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Ile	Gly	Ser	Leu	Gln	Asn	Gly	Thr	His	Thr	Pro	Ser	Thr	Ala	Met	Glu

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&lt;210&gt; 5528

&lt;211&gt; 176

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5528

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			20					25					30		
Val	Thr	Gly	Leu	Lys	Leu	Ser	Gln	Asp	Leu	Asp	Asp	Leu	Ala	Ile	Leu
		35					40					45			
Tyr	Leu	Ala	Thr	Val	Gln	Ala	Ile	Ala	Leu	Gly	Thr	Arg	Phe	Ile	Ile
	50					55					60				
Glu	Ala	Met	Glu	Ala	Ala	Gly	His	Ser	Ile	Ser	Thr	Leu	Phe	Leu	Cys
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Gly	Gly	Leu	Ser	Lys	Asn	Pro	Leu	Phe	Val	Gln	Met	His	Ala	Asp	Ile
				85					90					95	
Thr	Gly	Met	Pro	Val	Val	Leu	Ser	Gln	Glu	Val	Glu	Ser	Val	Leu	Val
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Gly	Ala	Ala	Val	Leu	Gly	Ala	Cys	Ala	Ser	Gly	Asp	Phe	Ala	Ser	Val
		115					120					125			
Gln	Glu	Ala	Met	Ala	Lys	Met	Ser	Lys	Val	Gly	Lys	Val	Val	Phe	Pro
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Lys	Leu	Val	Glu	His	Gln	Lys	Glu	Tyr	Leu	Ala	Ile	Met	Asn	Asp	Asp
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&lt;210&gt; 5529

&lt;211&gt; 2602

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5529

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 Ser His Pro Thr Ala Ser Ala Leu Ser Thr Gly Ser Pro Pro Met Lys  
 995 1000 1005  
 Asn Pro Ser His Pro Thr Ala Ser Thr Leu Ser Met Gly Leu Pro Pro  
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 1025 1030 1035 1040  
 Pro Pro Ser Glu Ser Pro Ser Arg Thr Gly Ser Ala Ala Ser Gly Ser  
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 Ser Gln Asn Gly Gln Gln Ser Gln Asp Val Gln Lys Lys Glu Thr Phe  
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 Pro Asn Val Ala Glu Glu Pro Ile Trp Arg Met Ile Arg Gln Thr Pro  
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&lt;210&gt; 5525

&lt;211&gt; 761

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5525

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 Gln Ala Pro Tyr Leu Val Pro Ala Phe Pro Leu Pro Ala Ala Thr Ser  
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 Pro Gly Arg Glu Tyr Ala Ala Pro Gly Thr Ala Pro Glu Gly Leu His  
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 820 825 830  
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4702

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<211> 1193

<212> PRT

<213> Homo sapiens

<400> 5524

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		20						25				30			
Leu	Gln	Arg	Lys	Leu	Ala	Asp	Ser	Ser	His	Ser	Glu	Gln	Asp	Arg	
		35					40					45			
Asn	Arg	Val	Ser	Glu	Glu	Leu	Ile	Met	Val	Val	Gln	Glu	Met	Lys	Lys
		50				55					60				
Tyr	Phe	Pro	Ser	Glu	Arg	Arg	Asn	Lys	Pro	Ser	Thr	Leu	Asp	Ala	Leu
65					70				75					80	
Asn	Tyr	Ala	Leu	Arg	Cys	Val	His	Ser	Val	Gln	Ala	Asn	Ser	Glu	Phe

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&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5516

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Ser Lys Val Ile Glu Glu Ala Gln Lys Leu Glu Asp Val Met Ala Lys
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Val Pro Gly Thr Gly His Ile Asp

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&lt;210&gt; 5514

&lt;211&gt; 248

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5514

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Gly	Gly	Pro	Ala	Glu	Leu	Ser	Leu	Arg	Leu	Gly	Glu	Pro	Leu	Thr	Ile
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Val	Ser	Glu	Asp	Gly	Asp	Trp	Trp	Thr	Val	Leu	Ser	Glu	Val	Ser	Gly
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Arg	Glu	Tyr	Asn	Ile	Pro	Ser	Val	His	Val	Ala	Lys	Val	Ser	His	Gly
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Trp	Leu	Tyr	Glu	Gly	Leu	Ser	Arg	Glu	Lys	Ala	Glu	Asp	Leu	Leu	Leu
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Leu	Pro	Gly	Asn	Pro	Gly	Gly	Ala	Phe	Leu	Ile	Arg	Glu	Ser	Gln	Thr
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Arg	Arg	Gly	Ser	Tyr	Ser	Leu	Ser	Val	Arg	Leu	Ser	Arg	Pro	Ala	Ser
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Trp	Asp	Arg	Ile	Arg	His	Tyr	Arg	Ile	His	Cys	Leu	Asp	Asn	Gly	Trp
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Leu	Tyr	Ile	Ser	Pro	Arg	Leu	Thr	Phe	Pro	Ser	Leu	Gln	Ala	Leu	Val
145				150						155				160	
Asp	His	Tyr	Ser	Glu	Leu	Ala	Asp	Asp	Ile	Cys	Cys	Leu	Leu	Lys	Glu

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 <212> DNA  
 <213> Homo sapiens

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 <213> Homo sapiens

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 35 40 45  
 Lys Trp Arg Glu Glu His Arg Leu Ser Ala Thr Gln Gln Ser Glu Leu  
 50 55 60  
 Arg Asp Val Cys Asp Tyr Ala Ile Glu Thr Met Pro Ser Phe Pro Lys  
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 Ala Cys Asp Thr Pro  
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<210> 5513  
 <211> 837  
 <212> DNA  
 <213> Homo sapiens

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435

440

445

&lt;210&gt; 5509

&lt;211&gt; 818

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5509

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&lt;210&gt; 5510

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5510

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 Ala Phe Ser Gln Ile Pro Gly His Asn Leu Asn Lys Lys Thr Pro Pro  
 20 25 30  
 Gly Val Lys Pro Pro Glu Ser His Val Cys Gly Glu Val Gly Val Gly  
 35 40 45  
 Tyr Pro Ser Thr Glu Arg His Ile Arg Asp Arg Leu Gly Arg Lys Pro  
 50 55 60  
 Cys Glu Tyr Gln Glu Cys Arg Gln Lys Ala Tyr Thr Cys Lys Pro Cys  
 65 70 75 80  
 Gly Asn Ala Phe Arg Phe His His Ser Phe His Ile His Glu Arg Pro

1	5	10	15
Leu Asp Pro Tyr Thr Glu Leu Arg Lys Gln Pro Leu Arg Lys Tyr Val			
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Thr Pro Ser Asp Phe Asp Gln Leu Lys Gln Phe Leu Thr Phe Asp Lys			
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Gln Val Leu Arg Phe Tyr Ala Ile Trp Asp Asp Thr Asp Ser Met Tyr			
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Gly Glu Cys Arg Thr Tyr Ile Ile His Tyr Tyr Leu Met Asp Asp Thr			
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Val Glu Ile Arg Glu Val His Glu Arg Asn Asp Gly Arg Asp Pro Phe			
85	90	95	
Pro Leu Leu Met Asn Arg Gln Arg Val Pro Lys Val Leu Val Glu Asn			
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Ala Lys Asn Phe Pro Gln Cys Val Leu Glu Ile Ser Asp Gln Glu Val			
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Leu Glu Trp Tyr Thr Ala Lys Asp Phe Ile Val Gly Lys Ser Leu Thr			
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Ile Leu Gly Arg Thr Phe Phe Ile Tyr Asp Cys Asp Pro Phe Thr Arg			
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Arg Tyr Tyr Lys Glu Lys Phe Gly Ile Thr Asp Leu Pro Arg Ile Asp			
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Val Ser Lys Arg Glu Pro Pro Pro Val Lys Gln Glu Leu Pro Pro Tyr			
180	185	190	
Asn Gly Phe Gly Leu Val Glu Asp Ser Ala Gln Asn Cys Phe Ala Leu			
195	200	205	
Ile Pro Lys Ala Pro Lys Lys Asp Val Ile Lys Met Leu Val Asn Asp			
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Asn Lys Val Leu Arg Tyr Leu Ala Val Leu Glu Ser Pro Ile Pro Glu			
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Asp Lys Asp Arg Arg Phe Val Phe Ser Tyr Phe Leu Ala Thr Asp Met			
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Ile Ser Ile Phe Glu Pro Pro Val Arg Asn Ser Gly Ile Ile Gly Gly			
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Lys Tyr Leu Gly Arg Thr Lys Val Val Lys Pro Tyr Ser Thr Val Asp			
275	280	285	
Asn Pro Val Tyr Tyr Gly Pro Ser Asp Phe Phe Ile Gly Ala Val Ile			
290	295	300	
Glu Val Phe Gly His Arg Phe Ile Ile Leu Asp Thr Asp Glu Tyr Val			
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Leu Lys Tyr Met Glu Ser Asn Ala Ala Gln Tyr Ser Pro Glu Ala Leu			
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Ala Ser Ile Gln Asn His Val Arg Lys Arg Glu Ala Pro Ala Pro Glu			
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Ala Glu Ser Lys Gln Thr Glu Lys Asp Pro Gly Val Gln Glu Leu Glu			
355	360	365	
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370	375	380	
Asp Asn Ile Arg Glu Ala Phe Gln Ile Tyr Asp Lys Glu Ala Ser Gly			
385	390	395	400
Tyr Val Asp Arg Asp Met Phe Phe Lys Ile Cys Glu Ser Leu Asn Val			
405	410	415	
Pro Val Asp Asp Ser Leu Val Lys Glu Leu Ile Arg Met Cys Ser His			
420	425	430	
Gly Glu Gly Lys Ile Asn Tyr Tyr Asn Phe Val Arg Ala Phe Ser Asn			

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&lt;210&gt; 5508

&lt;211&gt; 448

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5508

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&lt;400&gt; 5506

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 35 40 45  
 Arg Gln Leu Leu Leu Asn Cys Arg Leu Val Cys Ser Leu Trp Arg Asp  
 50 55 60  
 Leu Ile Asp Leu Val Thr Leu Trp Lys Arg Lys Cys Leu Arg Glu Gly  
 65 70 75 80  
 Phe Ile Thr Glu Asp Trp Asp Gln Pro Val Ala Asp Trp Lys Ile Phe  
 85 90 95  
 Tyr Phe Leu Arg Ser Leu His Arg Asn Leu Leu His Asn Pro Cys Ala  
 100 105 110  
 Glu Glu Gly Phe Glu Phe Trp Ser Leu Asp Val Asn Gly Gly Asp Glu  
 115 120 125  
 Trp Lys Val Glu Asp Leu Ser Arg Asp Gln Arg Lys Glu Phe Pro Asn  
 130 135 140  
 Asp Gln Val Lys Lys Tyr Phe Val Thr Ser Tyr Tyr Thr Cys Leu Lys  
 145 150 155 160  
 Ser Gln Val Val Asp Leu Lys Ala Glu Gly Tyr Trp Glu Glu Leu Leu  
 165 170 175  
 Asp Thr Phe Arg Pro Asp Ile Val Val Lys Asp Trp Phe Ala Ala Arg  
 180 185 190  
 Ala Asp Cys Gly Cys Thr Tyr Gln Leu Lys Val Gln Leu Leu Ser Ala  
 195 200 205  
 Asp Tyr Phe Val Leu Ala Ser Phe Glu Pro Asp Pro Ala Thr Ile Gln  
 210 215 220  
 Gln Lys Ser Asp Ala Lys Trp Arg Glu Val Ser His Thr Phe Ser Asn  
 225 230 235 240  
 Tyr Pro Pro Gly Val Arg Tyr Ile Trp Phe Gln His Gly Gly Val Asp  
 245 250 255  
 Thr His Tyr Trp Ala Gly Trp Tyr Gly Pro Arg Val Thr Asn Ser Ser  
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 Ile Thr Ile Gly Pro Pro Leu Pro  
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&lt;210&gt; 5507

&lt;211&gt; 1658

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5507

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 <212> DNA  
 <213> Homo sapiens

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 <213> Homo sapiens

<210> 5504  
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 <213> Homo sapiens

<400> 5504  
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 Phe Gln Glu Asp His Tyr Pro Asp Ser Asp Lys Arg Arg Glu Ile Ala  
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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5501

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&lt;210&gt; 5502

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5502

Met	Ile	Leu	Gly	Lys	Arg	Leu	His	Leu	Asn	Phe	Arg	Tyr	Phe	Thr	Cys
1				5					10					15	
Glu	Ala	Gly	Thr	Lys	Pro	Cys	Ser	Ser	Glu	Val	Pro	Val	Gly	Ala	Gly
			20					25					30		
Gly	Ala	Ala	Leu	Gln	Val	Leu	Ala	His	Ala	Gln	Gln	Ala	Pro	His	Ser
			35				40					45			
Phe	Val	Thr	Thr	Lys	Gly	Thr	Val	Leu	Phe	Thr	Ala	Pro	Pro	Ala	Ser
	50					55				60					
Ala	Trp	Gln	Leu	Cys	Leu	Pro	Val	Leu	Tyr	Leu	Ile	Pro	Pro	Ala	Lys
65					70				75					80	
Leu	Ala	Arg	Gln	Gly	Pro	Ala	Leu	Lys	Glu	Ile	Ser	Leu	Pro	Asp	Pro
			85					90					95		
Trp	Thr	Trp	Lys	Trp	Arg	Leu	His	Val	Pro	Ala	Leu	Ala	Ala		
			100					105					110		

&lt;210&gt; 5503

&lt;211&gt; 1679

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5503

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 60

20	25	30
Leu Arg Phe Asn Glu Thr Thr	Leu Cys Lys Pro Leu Val Pro Arg Glu	
35	40	45
His Gln Phe Tyr Glu Thr	Leu Pro Ala Glu Met Arg Lys Phe Thr Pro	
50	55	60
Gln Tyr Lys Gly Val Val	Ser Val Arg Phe Glu Glu Asp Glu Asp Arg	
65	70	75
Asn Leu Cys Leu Ile Ala Tyr	Pro Leu Lys Gly Asp His Gly Ile Val	
85	90	95
Asp Ile Ala His Asn Ser Asp	Cys Glu Pro Lys Ser Lys Leu Leu Arg	
100	105	110
Trp Thr Thr Asn Lys Lys	His His Val Leu Glu Thr Glu Lys Thr Pro	
115	120	125
Lys Asp Trp Val Arg Gln	His Arg Lys Glu Glu Lys Met Lys Ser His	
130	135	140
Lys Leu Glu Glu Glu Phe	Glu Trp Leu Lys Lys Ser Glu Val Leu Tyr	
145	150	155
Tyr Thr Val Glu Lys Lys	Gly Asn Ile Ser Ser Gln Leu Lys His Tyr	
165	170	175
Asn Pro Trp Ser Met Lys	Cys His Gln Gln Leu Gln Arg Met Lys	
180	185	190
Glu Asn Ala Lys His Arg	Asn Gln Tyr Lys Phe Ile Leu Leu Glu Asn	
195	200	205
Leu Thr Ser Arg Tyr Glu	Val Pro Cys Val Leu Asp Leu Lys Met Gly	
210	215	220
Thr Arg Gln His Gly Asp	Asp Ala Ser Glu Glu Lys Ala Ala Asn Gln	
225	230	235
Ile Arg Lys Cys Gln Gln	Ser Thr Ser Ala Val Ile Gly Val Xaa Val	
245	250	255
Cys Gly Met Gln Val Tyr	Gln Ala Gly Ser Gly Gln Leu Met Phe Met	
260	265	270
Asn Lys Tyr His Gly Arg	Lys Leu Ser Val Gln Gly Phe Lys Glu Ala	
275	280	285
Leu Phe Gln Phe Phe His	Asn Gly Arg Tyr Leu Arg Arg Glu Leu Leu	
290	295	300
Gly Pro Val Leu Lys Lys	Leu Thr Glu Leu Lys Ala Val Leu Glu Arg	
305	310	315
Gln Glu Ser Tyr Arg Phe	Tyr Ser Ser Ser Leu Leu Val Ile Tyr Asp	
325	330	335
Gly Lys Glu Arg Pro Glu	Val Val Leu Asp Ser Asp Ala Glu Asp Leu	
340	345	350
Glu Asp Leu Ser Glu Glu	Ser Ala Asp Glu Ser Ala Gly Ala Tyr Ala	
355	360	365
Tyr Lys Pro Ile Gly Ala	Ser Ser Val Asp Val Arg Met Ile Asp Phe	
370	375	380
Ala His Thr Thr Cys Arg	Leu Tyr Gly Glu Asp Thr Val Val His Glu	
385	390	395
Gly Gln Asp Ala Gly Tyr	Ile Phe Gly Leu Gln Ser Leu Ile Asp Ile	
405	410	415
Val Thr Glu Ile Ser Glu	Glu Ser Gly Glu	
420	425	

&lt;210&gt; 5501

&lt;211&gt; 568

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720  
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780  
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1680  
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1860  
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1918

&lt;210&gt; 5500

&lt;211&gt; 426

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5500

Met	Ser	Pro	Ala	Phe	Arg	Ala	Met	Asp	Val	Glu	Pro	Arg	Ala	Lys	Gly
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Val	Leu	Leu	Glu	Pro	Phe	Val	His	Gln	Val	Gly	Gly	His	Ser	Cys	Val

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 <211> 150  
 <212> PRT  
 <213> Homo sapiens

<400> 5498  
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 His Pro Pro Ala Phe Ala Pro Arg Thr Leu Arg Met Ala Gln Leu Val  
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 Ala Gln Leu Trp Trp Ser Ser Pro Phe Ile His Ser Pro Gly Glu Thr  
 35 40 45  
 Asn Ile Pro His Thr Leu Thr Glu Pro His Ser Val Pro Gly Trp Cys  
 50 55 60  
 Trp Asp Thr Leu Arg Arg His Gly Ala Gly Gln Gly His Pro Gly Met  
 65 70 75 80  
 Ala Arg Ser Gly Thr Gly Glu Gly Gln Arg Glu Gly Asp Ile Glu Arg  
 85 90 95  
 Glu Glu Asp Glu Glu Glu Gly Asn Arg Ser Arg Lys Ser Arg Asp Ser  
 100 105 110  
 Arg Ser Gln Val Lys Gly Leu Pro Leu His Ser Arg Glu Gln Arg Asp  
 115 120 125  
 Pro Ser Ala Gly Ala Ser Glu Lys Ser Arg Asn Pro Ser Arg Met Gly  
 130 135 140  
 Thr Trp Gly Val Asn Phe  
 145 150

<210> 5499  
 <211> 1918  
 <212> DNA  
 <213> Homo sapiens

<400> 5499  
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 tgccctctgcc cttegtagat tctctgctgg gcctttggaa ctaacacagc aacttccagg  
 180  
 gtctcatgtt gaagacttta tggagcatcc tggccagaac aagccaagga gccaagacga  
 240  
 gagggacaca cggacaaaaca acagacagaa gacgtactgg ccgctggact ccgctgcctc  
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	260		265		270										
Phe	His	Met	Ala	Cys	Pro	Thr	Phe	Arg	Val	Ser	Ile	Ala	Arg	Leu	Glu
	275		280		285										
Met	Gly	Pro	Asp	Glu	Tyr	Glu	Glu	Met	Glu	Glu	Glu	Glu	Glu	Glu	Glu
	290		295		300										
Glu	Glu	Glu	Asp	Glu	Asp	Asp	Asp	Ser	Ala	Asp	Met	Asp	Glu	Ser	Asp
305			310		315									320	
Glu	Asp	Asp	Glu	Glu	Glu	Arg	Arg	Arg	Arg	Val	Phe	Asp	Val	Pro	Ile
			325		330									335	
Arg	Arg	Arg	Arg	Cys	Ser	Arg	Leu	Phe							
	340		345												

&lt;210&gt; 5497

&lt;211&gt; 1056

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5497

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120

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180

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240

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300

tcattcacat acaggcccca aagtcactgt tagtgctgca gtggctcttg tggacattgg  
360

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420

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480

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540

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600

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720

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780

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840

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900

catttgaacg ggggccttgc tggtcgcgtc cctgcattca cccgcgcggc catcccgctca  
960

tccaacagtt gatcctaact gagcaccccc acggccctgg tctggcctgg gcaccggcga  
1020

ccgtagccca tcccttgatg gcctctgtgt cccag

1056

gaatttaatt tcagggtcttc aacatgatga ccttggattt aatttaaagt cttcaacact  
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 2280  
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<210> 5496

<211> 345

<212> PRT

<213> Homo sapiens

<400> 5496

Met	Leu	Trp	Lys	Arg	Arg	Leu	Gly	Cys	Lys	Phe	Pro	Gly	Arg	Leu	Ser
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			20					25					30		
Leu	Leu	Gly	Ser	Met	Ala	Leu	Ser	Asn	His	Tyr	Arg	Ser	Glu	Asp	Leu
		35					40					45			
Leu	Asp	Val	Asp	Thr	Ala	Ala	Gly	Gly	Phe	Gln	Gln	Arg	Gln	Gly	Leu
	50					55					60				
Lys	Tyr	Cys	Leu	Pro	Leu	Thr	Phe	Cys	Ile	His	Thr	Gly	Leu	Ser	Gln
65					70					75				80	
Tyr	Ile	Ala	Val	Glu	Ala	Ala	Glu	Gly	Arg	Asn	Lys	Asn	Glu	Val	Phe
				85					90					95	
Tyr	Gln	Cys	Pro	Asp	Gln	Met	Ala	Arg	Asn	Pro	Ala	Ala	Ile	Asp	Met
			100					105					110		
Phe	Ile	Ile	Gly	Ala	Thr	Phe	Thr	Asp	Trp	Phe	Thr	Ser	Tyr	Val	Lys
		115					120					125			
Asn	Val	Val	Ser	Gly	Gly	Phe	Pro	Ile	Ile	Arg	Asp	Gln	Ile	Phe	Arg
	130					135					140				
Tyr	Val	His	Asp	Pro	Glu	Cys	Val	Ala	Thr	Thr	Gly	Asp	Ile	Thr	Val
145					150					155				160	
Ser	Val	Ser	Thr	Ser	Phe	Leu	Pro	Glu	Leu	Ser	Ser	Val	His	Pro	Pro
				165					170					175	
His	Tyr	Phe	Phe	Thr	Tyr	Arg	Ile	Arg	Ile	Glu	Met	Ser	Lys	Asp	Ala
			180					185					190		
Leu	Pro	Glu	Lys	Ala	Cys	Gln	Leu	Asp	Ser	Arg	Tyr	Trp	Arg	Ile	Thr
		195					200						205		
Asn	Ala	Lys	Gly	Asp	Val	Glu	Glu	Val	Gln	Gly	Pro	Gly	Val	Val	Gly
	210					215					220				
Glu	Phe	Pro	Ile	Ile	Ser	Pro	Gly	Arg	Val	Tyr	Glu	Tyr	Thr	Ser	Cys
225					230					235				240	
Thr	Thr	Phe	Ser	Thr	Thr	Ser	Gly	Tyr	Met	Glu	Gly	Tyr	Tyr	Thr	Phe
				245					250					255	
His	Phe	Leu	Tyr	Phe	Lys	Asp	Lys	Ile	Phe	Asn	Val	Ala	Ile	Pro	Arg

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1920  
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1980  
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2040

1010 1015 1020  
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 Tyr His Thr Val Leu Gln Thr Ser Ala Asp Phe Ile Asp Ala Leu Lys  
 1045 1050 1055  
 Lys Ala Arg Leu Ile Ala Ser Asn Val Thr Glu Thr Met Gly Ile Asn  
 1060 1065 1070  
 Gly Ser Ala Tyr Arg Val Phe Pro Tyr Ser Val Phe Tyr Val Phe Tyr  
 1075 1080 1085  
 Glu Gln Tyr Leu Thr Ile Ile Asp Asp Thr Ile Phe Asn Leu Gly Val  
 1090 1095 1100  
 Ser Leu Gly Ala Ile Phe Leu Val Thr Met Val Leu Leu Gly Cys Glu  
 1105 1110 1115 1120  
 Leu Trp Ser Ala Val Ile Met Cys Ala Thr Ile Ala Met Val Leu Val  
 1125 1130 1135  
 Asn Met Phe Gly Val Met Trp Leu Trp Gly Ile Ser Leu Asn Ala Val  
 1140 1145 1150  
 Ser Leu Val Asn Leu Val Met Ser Cys Gly Ile Ser Val Glu Phe Cys  
 1155 1160 1165  
 Ser His Ile Thr Arg Ala Phe Thr Val Ser Met Lys Gly Ser Arg Val  
 1170 1175 1180  
 Glu Arg Ala Glu Glu Ala Leu Ala His Met Gly Ser Ser Val Phe Ser  
 1185 1190 1195 1200  
 Gly Ile Thr Leu Thr Lys Phe Gly Gly Ile Val Val Leu Ala Phe Ala  
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 Lys Ser Gln Ile Phe Gln Ile Phe Tyr Phe Arg Met Tyr Leu Ala Met  
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 Val Leu Leu Gly Ala Thr His Gly Leu Ile Phe Leu Pro Val Leu Leu  
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 Ser Tyr Ile Gly Pro Ser Val Asn Lys Ala Lys Ser Cys Ala Thr Glu  
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 Glu Arg Tyr Lys Gly Thr Glu Arg Glu Arg Leu Leu Asn Phe  
 1265 1270 1275

&lt;210&gt; 5495

&lt;211&gt; 2414

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5495

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 420

580										585										590																											
Asn	Tyr	Lys	Asn	Pro	Asn	Leu	Thr	Ile	Ser	Phe	Thr	Ala	Glu	Arg	Ser	Asn	Pro	Asn	Leu	Thr	Ile	Ser	Phe	Thr	Ala	Glu	Arg	Ser	Asn	Pro	Asn	Leu	Thr	Ile	Ser	Phe	Thr	Ala	Glu	Arg	Ser						
595										600										605																											
Ile	Glu	Asp	Glu	Leu	Asn	Arg	Glu	Ser	Asp	Ser	Asp	Ser	Val	Phe	Thr	Val	Ile	Glu	Asp	Glu	Leu	Asn	Arg	Glu	Ser	Asp	Ser	Val	Phe	Thr	Val	Ile	Glu	Asp	Glu	Leu	Asn	Arg	Glu	Ser	Asp	Ser	Val	Phe	Thr	Val	
610										615										620																											
Val	Ile	Ser	Tyr	Ala	Ile	Met	Phe	Leu	Tyr	Ile	Ser	Leu	Ala	Leu	Gly	Val	Ile	Ser	Tyr	Ala	Ile	Met	Phe	Leu	Tyr	Ile	Ser	Leu	Ala	Leu	Gly	Val	Ile	Ser	Tyr	Ala	Ile	Met	Phe	Leu	Tyr	Ile	Ser	Leu	Ala	Leu	Gly
625										630										635																											
His	Ile	Lys	Ser	Cys	Arg	Arg	Leu	Leu	Val	Asp	Ser	Lys	Val	Ser	Leu	His	Ile	Lys	Ser	Cys	Arg	Arg	Leu	Leu	Val	Asp	Ser	Lys	Val	Ser	Leu	His	Ile	Lys	Ser	Cys	Arg	Arg	Leu	Leu	Val	Asp	Ser	Lys	Val	Ser	Leu
645										650										655																											
Gly	Ile	Ala	Gly	Ile	Leu	Ile	Val	Leu	Ser	Ser	Val	Ala	Cys	Ser	Leu	Gly	Ile	Ala	Gly	Ile	Leu	Ile	Val	Leu	Ser	Ser	Val	Ala	Cys	Ser	Leu	Gly	Ile	Ala	Gly	Ile	Leu	Ile	Val	Leu	Ser	Ser	Val	Ala	Cys	Ser	Leu
660										665										670																											
Gly	Val	Phe	Ser	Tyr	Ile	Gly	Leu	Pro	Leu	Thr	Leu	Ile	Val	Ile	Glu	Gly	Val	Phe	Ser	Tyr	Ile	Gly	Leu	Pro	Leu	Thr	Leu	Ile	Val	Ile	Glu	Gly	Val	Phe	Ser	Tyr	Ile	Gly	Leu	Pro	Leu	Thr	Leu	Ile	Val	Ile	Glu
675										680										685																											
Val	Ile	Pro	Phe	Leu	Val	Leu	Ala	Val	Gly	Val	Asp	Asn	Ile	Phe	Ile	Val	Ile	Pro	Phe	Leu	Val	Leu	Ala	Val	Gly	Val	Asp	Asn	Ile	Phe	Ile	Val	Ile	Pro	Phe	Leu	Val	Leu	Ala	Val	Gly	Val	Asp	Asn	Ile	Phe	Ile
690										695										700																											
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&lt;211&gt; 1278

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5494

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&lt;210&gt; 5493

&lt;211&gt; 6538

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5493

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4667

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&lt;210&gt; 5492

&lt;211&gt; 602

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5492

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Lys	Ser	Val	Lys	Leu	Pro	Val	Leu	Lys	Val	Arg	Ser	Met	Leu	Leu	Glu
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Ser	Val	Pro	Asp	Phe	Asp	Phe	Leu	Gln	His	Cys	Ala	Glu	Asn	Leu	Ser
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&lt;210&gt; 5491

&lt;211&gt; 5555

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5491

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&lt;210&gt; 5490

&lt;211&gt; 357

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5490

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&lt;210&gt; 5489

&lt;211&gt; 1600

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5489

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<211> 272

<212> PRT

<213> Homo sapiens

<400> 5488

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Asn	Pro	His	Arg	Thr	Tyr	Asn	Pro	Gln	Ser	His	Ile	Ile	Ser	Gly	Gly
				165				170						175	
Leu	Ala	Gly	Ala	Leu	Ala	Ala	Ala	Ala	Thr	Thr	Pro	Leu	Asp	Val	Cys
			180				185						190		
Lys	Thr	Leu	Leu	Asn	Thr	Gln	Glu	Asn	Val	Ala	Leu	Ser	Leu	Ala	Asn
			195			200					205				
Ile	Ser	Gly	Arg	Leu	Ser	Gly	Met	Ala	Asn	Ala	Phe	Arg	Thr	Val	Tyr

225		230		235		240									
Pro	Thr	Gln	Gln	Arg	Ser	Ile	Ala	Phe	Ser	Ser	Asn	Asn	Ser	Val	Ala
		245		250		255									
Lys	Pro	Ile	Gln	Lys	Ser	Ala	Lys	Ala	Ala	Thr	Glu	Glu	Ala	Ser	Ser
		260		265		270									
Arg	Ser	Pro	Lys	Ile	Asp	Gln	Lys	Lys	Ser	Pro	Tyr	Gly	Leu	Trp	Ile
		275		280		285									
Pro	Ile														
		290													

&lt;210&gt; 5487

&lt;211&gt; 1716

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5487

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 1440  
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 1549

<210> 5486

<211> 290

<212> PRT

<213> Homo sapiens

<400> 5486

Met	Ser	Asn	Tyr	Val	Asn	Asp	Met	Trp	Pro	Gly	Ser	Pro	Gln	Glu	Lys
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Asp	Ser	Pro	Ser	Thr	Ser	Arg	Ser	Gly	Gly	Ser	Ser	Arg	Leu	Ser	Ser
			20					25					30		
Arg	Ser	Arg	Ser	Arg	Ser	Phe	Ser	Arg	Ser	Ser	Arg	Ser	His	Ser	Arg
		35				40					45				
Val	Ser	Ser	Arg	Phe	Ser	Ser	Arg	Ser	Arg	Arg	Ser	Lys	Ser	Arg	Ser
		50				55					60				
Arg	Ser	Arg	Arg	Arg	His	Gln	Arg	Lys	Tyr	Arg	Arg	Tyr	Ser	Arg	Ser
65					70				75					80	
Tyr	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Arg	Tyr	Arg	Glu	Arg
			85					90						95	
Arg	Tyr	Gly	Phe	Thr	Arg	Arg	Tyr	Tyr	Arg	Ser	Pro	Ser	Arg	Tyr	Arg
		100						105					110		
Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Gly	Arg	Ser	Tyr	Cys	Gly
		115				120						125			
Arg	Ala	Tyr	Ala	Ile	Ala	Arg	Gly	Gln	Arg	Tyr	Tyr	Gly	Phe	Gly	Arg
		130				135						140			
Thr	Val	Tyr	Pro	Glu	Glu	His	Ser	Arg	Trp	Arg	Asp	Arg	Ser	Arg	Thr
145					150				155					160	
Arg	Ser	Arg	Ser	Arg	Thr	Pro	Phe	Arg	Leu	Ser	Glu	Lys	Asp	Arg	Met
			165					170					175		
Glu	Leu	Leu	Glu	Ile	Ala	Lys	Thr	Asn	Ala	Ala	Lys	Ala	Leu	Gly	Thr
		180						185					190		
Thr	Asn	Ile	Asp	Leu	Pro	Ala	Ser	Leu	Arg	Thr	Val	Pro	Ser	Ala	Lys
		195				200						205			
Glu	Thr	Ser	Arg	Gly	Ile	Gly	Val	Ser	Ser	Asn	Gly	Ala	Lys	Pro	Glu
		210				215					220				
Leu	Ser	Glu	Lys	Val	Thr	Glu	Asp	Gly	Thr	Arg	Asn	Pro	Asn	Glu	Lys

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 Gln Lys Ile Leu Gln Glu Glu Leu Cys Leu Ser Val Ile Thr Leu Phe  
 275 280 285  
 Pro Gly Ala Pro Val Val Leu Val Leu Cys Lys Asn Gly Asp Asp Arg  
 290 295 300  
 Gln Gln Trp Thr Lys Thr Gly Ser His Ile Glu His Ile Ala Ser His  
 305 310 315 320  
 Leu Cys Leu Asp Thr Asp Met Phe Gly Asp Gly Thr Glu Asn Gly Lys  
 325 330 335  
 Glu Ile Val Val Asn Pro Cys Glu Ser Ser Leu Met Ser Gln His Trp  
 340 345 350  
 Asp Met Val Ser Ser  
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&lt;210&gt; 5485

&lt;211&gt; 1549

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5485

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 1552

&lt;210&gt; 5484

&lt;211&gt; 357

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5484

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 Leu Xaa Asp Arg Val Lys Glu Asp Tyr Thr Arg Val Val Cys Pro Val  
 20 25 30  
 Ile Asp Ile Ile Asn Leu Asp Thr Phe Thr Tyr Ile Glu Ser Ala Ser  
 35 40 45  
 Glu Leu Arg Gly Gly Phe Asp Trp Ser Leu His Phe Gln Trp Glu Gln  
 50 55 60  
 Leu Ser Pro Glu Gln Lys Ala Arg Arg Leu Asp Pro Thr Glu Pro Ile  
 65 70 75 80  
 Arg Thr Pro Ile Ile Ala Gly Gly Leu Phe Val Ile Asp Lys Ala Trp  
 85 90 95  
 Phe Asp Tyr Leu Gly Lys Tyr Asp Met Asp Met Asp Ile Trp Gly Gly  
 100 105 110  
 Glu Asn Phe Glu Ile Ser Phe Arg Val Trp Met Cys Gly Gly Ser Leu  
 115 120 125  
 Glu Ile Val Pro Cys Ser Arg Val Gly His Val Phe Arg Lys Lys His  
 130 135 140  
 Pro Tyr Val Phe Pro Asp Gly Asn Ala Asn Thr Tyr Ile Lys Asn Thr  
 145 150 155 160  
 Lys Arg Thr Ala Glu Val Trp Met Asp Glu Tyr Lys Gln Tyr Tyr Tyr  
 165 170 175  
 Ala Ala Arg Pro Phe Ala Leu Glu Arg Pro Phe Gly Asn Val Glu Ser  
 180 185 190  
 Arg Leu Asp Leu Arg Lys Asn Leu Arg Cys Gln Ser Phe Lys Trp Tyr  
 195 200 205  
 Leu Glu Asn Ile Tyr Pro Glu Leu Ser Ile Pro Lys Glu Phe Ser Ile  
 210 215 220  
 Gln Lys Gly Asn Ile Arg Gln Arg Gln Lys Cys Leu Glu Ser Gln Arg  
 225 230 235 240  
 Gln Asn Asn Gln Glu Thr Pro Asn Leu Lys Leu Ser Pro Cys Ala Lys  
 245 250 255  
 Val Lys Gly Glu Asp Ala Lys Ser Gln Val Trp Ala Phe Thr Tyr Thr

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Asn	Tyr	Glu	Ser	Ala	Pro	Pro
					Ser	Pro
					Gln	Tyr
					Lys	Lys
					Ile	Ile
					Cys	
130					135	
Met	Gly	Ala	Lys	Glu	Asn	Gly
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					Leu	Glu
					Tyr	Gln
					Glu	Lys
					Leu	
145					150	
Lys	Ala	Ile	Glu	Pro	Asn	Asp
					Tyr	Thr
					Gly	Lys
					Val	Ser
					Glu	Glu
					Ile	
					165	
					170	
					175	
Glu	Asp	Ile	Ile	Lys	Lys	Gly
					Glu	Thr
					Gln	Leu
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&lt;210&gt; 5483

&lt;211&gt; 1552

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5483

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1140

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 1513

&lt;210&gt; 5482

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5482

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 Leu Arg Asn Pro Ser Ala Ala Phe Phe Cys Val Ala Arg Leu Gln Asp  
 35 40 45  
 Phe Lys Leu Asp Phe Gly Asn Ser Gln Gly Lys Thr Ser Gln Thr Trp  
 50 55 60  
 His Gly Gly Ile Ala Thr Ile Phe Gln Ser Pro Gly Asp Glu Leu Trp  
 65 70 75 80  
 Gly Val Val Trp Lys Met Asn Lys Ser Asn Leu Asn Ser Leu Asp Glu  
 85 90 95  
 Gln Glu Gly Val Lys Ser Gly Met Tyr Val Val Ile Glu Val Lys Val  
 100 105 110  
 Ala Thr Gln Glu Gly Lys Glu Ile Thr Cys Arg Ser Tyr Leu Met Thr

35 40 45  
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 50 55 60  
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 65 70 75 80  
 Arg Leu Gln Lys Gln Lys Glu Glu Ala Glu Ala Arg Ser Arg Glu Glu  
 85 90 95  
 Ala Glu Arg Gln Arg Leu Glu Arg Glu Lys His Phe Gln Gln Gln Glu  
 100 105 110  
 Gln Glu Arg Gln Glu Arg Arg Lys Arg Leu Glu Glu Ile Met Lys Arg  
 115 120 125  
 Thr Arg Lys Ser Glu Val Ser Glu Thr Lys Gln Lys Gln Asp Ser Lys  
 130 135 140  
 Glu Ala Asn Ala Asn Gly Ser Ser Pro Glu Pro Val Lys Ala Val Glu  
 145 150 155 160  
 Ala Arg Ser Pro Gly Leu Gln Lys Glu Ala Val Gln Lys Glu Glu Pro  
 165 170 175  
 Ile Pro Gln Glu Pro Gln Trp Ser Leu Pro Ser Lys Glu Leu Pro Ala  
 180 185 190  
 Ser Leu Val Asn Gly Leu Gln Pro Leu Pro Ala His Gln Glu Asn Gly  
 195 200 205  
 Phe Ser Thr Asn Gly Pro Ser Gly Asp Lys Ser Leu Ser Arg Thr Pro  
 210 215 220  
 Glu Thr Leu Leu Pro Phe Ala Glu Ala Glu Ala Phe Leu Lys Lys Ala  
 225 230 235 240  
 Val Val Gln Ser Pro Gln Val Thr Glu Val Leu  
 245 250

&lt;210&gt; 5481

&lt;211&gt; 1513

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5481

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 300  
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 360  
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 420  
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 480  
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 540  
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&lt;210&gt; 5480

&lt;211&gt; 251

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5480

Ala	Gly	Thr	Thr	Asp	Arg	Glu	Glu	Ala	Thr	Arg	Leu	Leu	Ala	Glu	Lys
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Arg	Arg	Gln	Ala	Arg	Glu	Gln	Arg	Glu	Arg	Glu	Glu	Gln	Glu	Arg	Arg
			20				25						30		
Leu	Gln	Ala	Glu	Arg	Asp	Lys	Arg	Met	Arg	Glu	Glu	Gln	Leu	Ala	Arg

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&lt;210&gt; 5478

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5478

Ser	Ala	Ser	Val	Lys	Ala	Arg	Ser	Pro	Gly	Pro	Tyr	Gly	Pro	Pro	Arg
1				5					10					15	
Pro	Trp	Gly	Trp	Ala	Gly	Pro	Tyr	Ser	Ala	Tyr	Val	Ser	Leu	Cys	Gly
			20					25					30		
Ala	Pro	Gly	Gln	Arg	Gly	Arg	Lys	Arg	Trp	Leu	Leu	Val	Arg	Leu	Tyr
			35				40					45			
Lys	Thr	Trp	Pro	Leu	Thr	Cys	Arg	Pro	Pro	Thr	Gln	Leu	Ala	Gly	Trp
			50			55					60				
Ala	Gly	Leu	Ser	Pro	Leu	Ala	Ser	Pro	Gly	Pro	Leu	Ala	Gly	Ser	Ser
65					70				75					80	
Thr	Ser	Leu	Ser	Ala	Leu	Ser	Ala	Arg	Pro	Pro	Pro	Asp	Ser	Ser	Ser
				85				90						95	
Leu	Ser	Pro													

&lt;210&gt; 5479

&lt;211&gt; 1386

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5479

gccggcacca cagaccgaga agaagccact cggctcttgg ctgagaagcg gcgccaggcc  
 60  
 cgaggagcagc gggagcgcga ggagcaggag cggaggctgc aggcagaaag ggacaagcga  
 120  
 atgcgagagg agcagctggc acgggaggcc gaggcccggg cggagcggga ggcggaggcc  
 180

cctgagaaga aagcagcggg cggggcgcca cggagggggc ctctgggggg acggaaaaaa  
 540  
 aagaaggcgc cgtcagcctc cgactccgac tccaaggccg attcggacgg ggccaagcct  
 600  
 gagccggtgg ccatggcgcg gtcggcgt  
 628

<210> 5476

<211> 209

<212> PRT

<213> Homo sapiens

<400> 5476

Gly	Thr	His	Glu	Thr	Ala	Phe	Leu	Gly	Pro	Lys	Asp	Leu	Phe	Pro	Tyr
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Asp	Lys	Cys	Lys	Asp	Lys	Tyr	Gly	Lys	Pro	Asn	Lys	Arg	Lys	Gly	Phe
			20					25					30		
Asn	Glu	Gly	Leu	Trp	Glu	Ile	Gln	Asn	Asn	Pro	His	Ala	Ser	Tyr	Ser
			35				40					45			
Ala	Pro	Pro	Pro	Val	Ser	Ser	Ser	Asp	Ser	Glu	Ala	Pro	Glu	Ala	Asn
	50				55					60					
Pro	Ala	Asp	Gly	Ser	Asp	Ala	Asp	Glu	Asp	Asp	Glu	Asp	Arg	Gly	Val
65				70				75						80	
Met	Ala	Val	Thr	Ala	Val	Thr	Ala	Thr	Ala	Ala	Ser	Asp	Arg	Met	Glu
			85				90					95			
Ser	Asp	Ser	Asp	Ser	Asp	Lys	Ser	Ser	Asp	Asn	Ser	Gly	Leu	Lys	Arg
	100						105					110			
Lys	Thr	Pro	Ala	Leu	Lys	Met	Ser	Val	Ser	Lys	Arg	Ala	Arg	Lys	Ala
	115						120					125			
Ser	Ser	Asp	Leu	Asp	Gln	Ala	Ser	Val	Ser	Pro	Ser	Glu	Glu	Glu	Asn
	130				135					140					
Ser	Glu	Ser	Ser	Ser	Glu	Ser	Glu	Lys	Thr	Ser	Asp	Gln	Asp	Phe	Thr
145				150				155						160	
Pro	Glu	Lys	Lys	Ala	Ala	Val	Arg	Ala	Pro	Arg	Arg	Gly	Pro	Leu	Gly
			165				170					175			
Gly	Arg	Lys	Lys	Lys	Lys	Ala	Pro	Ser	Ala	Ser	Asp	Ser	Asp	Ser	Lys
	180					185					190				
Ala	Asp	Ser	Asp	Gly	Ala	Lys	Pro	Glu	Pro	Val	Ala	Met	Ala	Arg	Ser
	195					200					205				
Ala															

<210> 5477

<211> 727

<212> DNA

<213> Homo sapiens

<400> 5477

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 120  
 gggcccttct cactgagctc gtgaagtgcc tcagtcaagg caaggtcccc tggccatat  
 180

ttttgatcac gacctcttta gctttgcaga tttgatcttt gggaagtggc ctgtggttct  
 600  
 tatcaccaat cctaaatcac tcctttatag ttgtggtgaa catgaaccac tagaaagact  
 660  
 tcttcactca acccacatta gattggtaac a  
 691

<210> 5474  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 5474  
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 Ser Asn His Thr Ile Trp Phe Gly His Phe Thr Thr Ser Thr Ile Leu  
 20 25 30  
 Ser Pro Ser Pro Gly Ile Arg Ser Ile Met Ser Ser Ala Ile Ala Tyr  
 35 40 45  
 Leu Cys Gly His Leu His Thr Leu Gly Gly Leu Met Pro Val Leu His  
 50 55 60  
 Thr Arg His Phe Gln Gly Thr Leu Glu Leu Glu Val Gly Asp Trp Lys  
 65 70 75 80  
 Asp Asn Arg Arg Tyr Arg Ile Phe Ala Phe Asp His Asp Leu Phe Ser  
 85 90 95  
 Phe Ala Asp Leu Ile Phe Gly Lys Trp Pro Val Val Leu Ile Thr Asn  
 100 105 110  
 Pro Lys Ser Leu Leu Tyr Ser Cys Gly Glu His Glu Pro Leu Glu Arg  
 115 120 125  
 Leu Leu His Ser Thr His Ile Arg Leu Val Thr  
 130 135

<210> 5475  
 <211> 628  
 <212> DNA  
 <213> Homo sapiens

<400> 5475  
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 gacaagtacg ggaagcccaa caagaggaaa ggcttcaatg aagggtgtg ggagatccag  
 120  
 aacaaccccc acgccagcta cagegcccct ccgccagtga gtcctccga cagcgaggcc  
 180  
 cccgaggcca accccgccga cggcagtgc gctgacgagg acgatgagga ccgggggggc  
 240  
 atggccgtca cagcggtaac cgccacagct gccagcgaca ggatggagag cgactcagac  
 300  
 tcagacaaga gtagcgacaa cagtggcctg aagaggaaga cgctgcgct aaagatgtcg  
 360  
 gtctcgaaac gagcccgaaa ggcctccagc gacctggatc aggccagcgt gtccccatcc  
 420  
 gaagaggaga actcggaag ctcatctgag tcggagaaga ccagcgacca ggacttcaca  
 480

&lt;210&gt; 5472

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5472

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Met Leu Cys Gly Ser Arg His Thr Arg Val Thr His Thr Gln Pro Cys
 1             5             10             15
Pro Arg Leu Pro Pro His Pro His Pro Asp Lys Arg Thr Leu Trp Ser
      20             25             30
Pro Ser Ala His Leu Leu Gly Leu His Thr Gln Arg His Ala Asp Gly
      35             40             45
Phe Leu Cys Leu Cys Thr His Ala Gly Ala Gly Gly Ser Val His Thr
      50             55             60
Pro Pro Arg Leu Arg Ala Arg Pro Tyr Met Pro Cys Ala Pro Thr Gln
      65             70             75             80
Ala Gly Leu Gly Ser Leu His Ser Pro Leu Arg Val His Ser His Ile
      85             90             95
Ala Thr His Ser Cys Pro His Lys Leu Val Ser Leu Tyr Ser Ala His
      100            105            110
Gly His Thr Cys Ala Pro His Leu Ala Thr Arg Thr Pro Gly Leu Cys
      115            120            125
Ile Pro His Pro Gly Ser Gly Pro Arg Val Val Gly Pro Ala Gly Ser
      130            135            140
Ala Ala Ala Ser Ala Arg Thr Val Leu Phe Leu Arg Pro Arg Gly Ala
      145            150            155            160
Ala

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&lt;210&gt; 5473

&lt;211&gt; 691

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5473

```

gcgaccagca gcgctggtgg ccatgctctt ggacactacg gcctggcggg cagccctcgc
60
cgctgccgcg ccccgcgccc ccaggaggcc gcaccctgcg ccaggggccc gagacagcaa
120
catcttcttg ggctgcagg agacctgaca gatgccaaaa caaaggaaca gttgggatcc
180
aggcagcatg aggtagaatg gcaaacctac cagggtattc tgaagaagac aagagtcatg
240
gaaaaaaacca agtggctgga tatcaaagga aatcatgaaa aagatggagg agctcttatt
300
actggccaag gaaagcagtc ggagcaacca tacaatttgg tttggacact ttacaacatc
360
cactattctt tctccatcac caggaatccg gtcaataatg agttcggcta tagcttattt
420
gtgtggacat ctccatacac ttggtggact gatgcctggt ttgcacactc gtcacttcca
480
gggcactttg gaacttgagg tgggagactg gaaggataat aggaggtacc ggatttttgc
540

```

195 200 205  
 Asp Ala Leu Lys Gln Arg Ala Glu Gln Ser Ile Ser Glu Glu Pro Gly  
 210 215 220  
 Trp Glu Glu Glu Glu Glu Glu Leu Met Gly Ile Ser Pro Ile Ser Pro  
 225 230 235 240  
 Lys Glu Ala Lys Val Pro Val Ala Lys Ile Ser Thr Phe Pro Glu Gly  
 245 250 255  
 Glu Pro Gly Pro Gln Ser Pro Cys Glu Glu Asn Leu Val Thr Ser Val  
 260 265 270  
 Glu Pro Pro Ala Glu Val Thr Pro Ser Glu Ser Ser Glu Ser Ile Ser  
 275 280 285  
 Leu Val Thr Gln Ile Ala Asn Pro Ala Thr Ala Pro Glu Ala Arg Val  
 290 295 300  
 Leu Pro Lys Asp Leu Ser Gln Lys Leu Leu Glu Ala Ser Leu Glu Glu  
 305 310 315 320  
 Gln Gly Leu Ala Val Asp Val Gly Glu Thr Gly Pro Ser Pro Ile  
 325 330 335  
 His Ser Lys Pro Leu Thr Pro Ala Gly His Thr Gly Gly Pro Glu Pro  
 340 345 350  
 Arg Pro Pro Ala Arg Val Glu Thr Leu Arg Glu Glu Ala Pro Thr Asp  
 355 360 365  
 Leu Arg Val Phe Glu Leu Asn Ser Asp Ser Gly Lys Ser Thr Pro Ser  
 370 375 380  
 Asn Asn Gly Lys Lys Gly Ser Ser Thr Asp Ile Ser Glu Asp Trp Glu  
 385 390 395 400  
 Lys Asp Phe Asp Leu Asp Met Thr Glu Glu Val Gln Met Ala Leu  
 405 410 415  
 Ser Lys Val Asp Ala Ser Gly Glu Leu Lys Met  
 420 425

&lt;210&gt; 5471

&lt;211&gt; 534

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5471

cggccgcccc gcgggggcgc agaaatagga ccgtcctggc agaggctgca gccgacccag  
 60  
 ctggccccac tacgcggggc ccagagccag ggtgggggat gcagagaccg ggcgtgcggg  
 120  
 ttgccagggtg tggcgcacat gtgtgcccgt gggcagagta cagagacaca agcttggtg  
 180  
 gacacgaatg tgtagctatg tgcgagtgcacacggagtgg tgagtgcagg gacccaggc  
 240  
 cggcctgcgt cgggtgcgcag ggcataatagg ggcgtgcacg cagtcttga ggtgtgtgca  
 300  
 cagagcccc ggcacccgcg tgtgtgcaaa gacacaggaa cccgtctgcg tggcgctgtg  
 360  
 tgtgcaacct aaggaggtgg gcgcttgac tccaaagtgt gcgcttatcc ggatgtggat  
 420  
 gtgggggcag ccggggacag ggctgggtgt gcgtgactcg ggtgtgccgg gacccacaga  
 480  
 gcatatgtgt ccatgcctgg tgctgtgact catgtccctg ggggtgggcac gcgt  
 534

gaagagcccc gctgggagga ggaggaagag gagctcatgg gcatttcacc catatctcca  
 720  
 aaagaggcaa aggttctgt ggccaaaatt tctacattcc ctgaaggaga acctggcccc  
 780  
 cagagcccc gtgaagagaa tctggtgact tcagttgagc cccagcaga ggtgactcca  
 840  
 tcagagagca gtgagagcat ctccctcgtg acacagatcg ccaaccggc cactgcacct  
 900  
 gaggcacgag tgctacccaa ggacctgtcc caaaagctgc tagaggcatc cttggaggaa  
 960  
 cagggcctgg ctgtggatgt ggtgagact ggacctcac cccctattca ctccaagccc  
 1020  
 ctaacgctg ctggccacac cggcgccca gagcccaggc ctccagccag agtagagact  
 1080  
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 1140  
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 1200  
 aaagactttg acttgacat gactgaagag gaggtgcaga tggcactttc caaagtggat  
 1260  
 gcctccgggg agctgaagat gtagaggggg aa  
 1292

&lt;210&gt; 5470

&lt;211&gt; 427

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5470

Xaa	Ala	Ala	Ala	Ser	Thr	Glu	Gly	Glu	Asp	Val	Gly	Trp	Trp	Arg	Ser
1				5					10					15	
Trp	Leu	Gln	Gln	Ser	Tyr	Gln	Ala	Val	Lys	Glu	Lys	Ser	Ser	Glu	Ala
		20						25					30		
Leu	Glu	Phe	Met	Lys	Arg	Asp	Leu	Thr	Glu	Phe	Thr	Gln	Val	Val	Gln
		35					40					45			
His	Asp	Thr	Ala	Cys	Thr	Ile	Ala	Ala	Thr	Ala	Ser	Val	Val	Lys	Glu
		50					55				60				
Lys	Leu	Ala	Thr	Glu	Gly	Ser	Ser	Gly	Ala	Thr	Glu	Lys	Met	Lys	Lys
		65			70				75					80	
Gly	Leu	Ser	Asp	Phe	Leu	Gly	Val	Ile	Ser	Asp	Thr	Phe	Ala	Pro	Ser
			85						90					95	
Pro	Asp	Lys	Thr	Ile	Asp	Cys	Asp	Val	Ile	Thr	Leu	Met	Gly	Thr	Pro
			100					105					110		
Ser	Gly	Thr	Ala	Glu	Pro	Tyr	Asp	Gly	Thr	Lys	Ala	Arg	Leu	Tyr	Ser
		115					120					125			
Leu	Gln	Ser	Asp	Pro	Ala	Thr	Tyr	Cys	Asn	Glu	Pro	Asp	Gly	Pro	Pro
		130					135					140			
Glu	Leu	Phe	Asp	Ala	Trp	Leu	Ser	Gln	Phe	Cys	Leu	Glu	Glu	Lys	Lys
		145			150				155					160	
Gly	Glu	Ile	Ser	Glu	Leu	Leu	Val	Gly	Ser	Pro	Ser	Ile	Arg	Ala	Leu
			165					170					175		
Tyr	Thr	Lys	Met	Val	Pro	Ala	Ala	Val	Ser	His	Ser	Glu	Phe	Trp	His
			180					185					190		
Arg	Tyr	Phe	Tyr	Lys	Val	His	Gln	Leu	Glu	Gln	Glu	Gln	Ala	Arg	Arg

165 170 175  
 Met Thr Gln Leu Pro Val Ile Lys Ala Glu Pro Leu Glu Val Asn Gln  
 180 185 190  
 Phe Leu Lys Val Thr Pro Glu Asp Leu Val Gln Met Pro Pro Thr Pro  
 195 200 205  
 Pro Ser Ser His Gly Ser Asp Ser Asp Gly Ser Gln Ser Pro Arg Ser  
 210 215 220  
 Leu Pro Pro Ser Ser Pro Val Arg Pro Met Ala Arg Ser Ser Thr Ala  
 225 230 235 240  
 Ile Ser Ser Ser Pro Leu Leu Thr Ala Pro His Lys Leu Gln Gly Thr  
 245 250 255  
 Ser Gly Pro Leu Val Leu Thr Glu Glu Lys Arg Thr Leu Ile Ala  
 260 265 270  
 Glu Gly Tyr Pro Ile Pro Thr Lys Leu Pro Leu Thr Lys Ser Glu Glu  
 275 280 285  
 Lys Ala Leu Lys Lys Ile Arg Arg Lys Ile Lys Asn Lys Ile Ser Ala  
 290 295 300  
 Gln Glu Ser Arg Arg Lys Lys Lys Glu Tyr Met Asp Ser Leu Glu Lys  
 305 310 315 320  
 Lys Val Glu Ser Cys Ser Thr Glu Asn Leu Glu Leu Arg Lys Lys Val  
 325 330 335  
 Glu Thr Leu Glu Asn Ala Asn Ser Phe Ser Ser Gly Ile Gln Pro Leu  
 340 345 350  
 Leu Cys Ser Leu Ile Gly Leu Glu Asn Pro Thr  
 355 360

&lt;210&gt; 5469

&lt;211&gt; 1292

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5469

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 agctaccaag cagtcacaaga gaagtcctct gaagccttgg agtttatgaa gcgggacctg  
 120  
 acggagttaa cccaggtggt gcagcatgac acggcctgta ccatcgagc cacggccagc  
 180  
 gtggtcaagg agaagctggc tacggaaggc tcctcaggag caacagagaa gatgaagaaa  
 240  
 gggttatctg acttcctagg ggtgatctca gacacctttg ccccttcgcc agacaaaacc  
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 ggcaccaagg ctgcctcta tagcctgcag tcggacccag caacctactg taatgaacca  
 420  
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 600  
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 660

ggagagatga ctcagctgcc agtgatcaaa gcagagcctc tggagggtgaa ccagttcctc  
 660  
 aaagtgcacac cggaggacct ggtgcagatg cctccgacgc cccccagcag ccatggcagt  
 720  
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 780  
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 gggacatcag gccctctggt cctgacagag gaggagaaga ggaccctgat tgctgagggc  
 900  
 tatcccatcc ccacaaact cccctcacc aaatcagagg agaaggcctt gaagaaaatt  
 960  
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 1080  
 aaggtagaga ccctggagaa tgccaacagc ttctccagcg ggatccagcc actcctctgt  
 1140  
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 1200  
 gggttccttt ctggcccaa gtaggtccaa gccctttag ttatttcgcc acctgctgta  
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 1329

<210> 5468

<211> 363

<212> PRT

<213> Homo sapiens

<400> 5468

Met	Asp	Ala	Val	Leu	Glu	Pro	Phe	Pro	Ala	Asp	Arg	Leu	Phe	Pro	Gly
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Ser	Ser	Phe	Leu	Asp	Leu	Gly	Asp	Leu	Asn	Glu	Ser	Asp	Phe	Leu	Asn
		20					25					30			
Asn	Ala	His	Phe	Pro	Glu	His	Leu	Asp	His	Phe	Thr	Glu	Asn	Met	Glu
	35					40					45				
Asp	Phe	Ser	Asn	Asp	Leu	Phe	Ser	Ser	Phe	Phe	Asp	Asp	Pro	Val	Leu
	50				55					60					
Asp	Glu	Lys	Ser	Pro	Leu	Leu	Asp	Met	Glu	Leu	Asp	Ser	Pro	Thr	Pro
65			70					75					80		
Gly	Ile	Gln	Ala	Glu	His	Ser	Tyr	Ser	Leu	Ser	Gly	Asp	Ser	Ala	Pro
		85					90					95			
Gln	Ser	Pro	Leu	Val	Pro	Ile	Lys	Met	Glu	Asp	Thr	Thr	Gln	Asp	Ala
	100						105					110			
Glu	His	Gly	Ala	Trp	Ala	Leu	Gly	His	Lys	Leu	Cys	Ser	Ile	Met	Val
	115					120					125				
Lys	Gln	Glu	Gln	Ser	Pro	Glu	Leu	Pro	Val	Asp	Pro	Leu	Ala	Ala	Pro
	130					135				140					
Ser	Ala	Met	Ala	Ala	Ala	Ala	Ala	Met	Ala	Thr	Thr	Pro	Leu	Leu	Gly
145			150					155					160		
Leu	Ser	Pro	Leu	Ser	Arg	Leu	Pro	Ile	Pro	His	Gln	Ala	Pro	Gly	Glu

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497

<210> 5466

<211> 134

<212> PRT

<213> Homo sapiens

<400> 5466

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Asp Gly Gln Ala Ala Trp Val Ala Gly Pro Arg Lys Ala Gly Val Asp  
20 25 30  
Val Arg Asp Glu Pro Pro Ala Lys Pro Val Gly Met Ser Gly Pro Ser  
35 40 45  
Trp Trp Asp Cys Leu Gly His Arg His Gln His Gly Val Arg Ala Ile  
50 55 60  
Ser Gly Asp Ile Gly Gly Ala Thr Thr Arg Trp Gly Ile Phe Asn Arg  
65 70 75 80  
Leu Glu Pro Leu Arg Leu Glu Arg Pro Thr Pro Gly Arg Arg Pro Pro  
85 90 95  
Leu Thr Pro Leu Leu Pro Leu Leu Trp Asp Pro Pro Val Asp Thr Pro  
100 105 110  
Asp Glu Asp Thr Gln Glu Ala Ser Ser Gln Asp Arg Arg Gln Leu Pro  
115 120 125  
Gly Gln Pro Arg Ser Ala  
130

<210> 5467

<211> 1329

<212> DNA

<213> Homo sapiens

<400> 5467

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120  
cccggatcca gtttctgga cttgggggat ctgaacgagt cggacttcct caacaatgcg  
180  
cactttcctg agcacctgga ccactttacg gagaacatgg aggacttctc caatgacctg  
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360  
gcgccccaga gccccttgt gcccatcaag atggaggaca ccaccaaga tgcagagcat  
420  
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480  
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540  
accacccgc tgctgggct cagccccttg tccaggctgc ccatcccca ccaggccccg  
600

gtgaagcagc gcttgcagat gtacaactcg cagcaccggt cagcaatcag ctgcatccgg  
 600  
 acggtgtgga ggaccgaggg gttggggggcc ttctaccgga gctacaccac gcagctgacc  
 660  
 atgaacatcc ccttccagtc catccacttc atcacctatg agttcctgca ggagcaggtc  
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 780  
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 792

<210> 5464  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 5464  
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 1 5 10 15  
 Leu His Asp Ala Val Met Asn Pro Ala Glu Val Val Lys Gln Arg Leu  
 20 25 30  
 Gln Met Tyr Asn Ser Gln His Arg Ser Ala Ile Ser Cys Ile Arg Thr  
 35 40 45  
 Val Trp Arg Thr Glu Gly Leu Gly Ala Phe Tyr Arg Ser Tyr Thr Thr  
 50 55 60  
 Gln Leu Thr Met Asn Ile Pro Phe Gln Ser Ile His Phe Ile Thr Tyr  
 65 70 75 80  
 Glu Phe Leu Gln Glu Val Asn Pro His Arg Thr Tyr Asn Pro Gln  
 85 90 95  
 Ser His Ile Ile Ser Gly Gly Leu Ala Gly Ala Leu Ala Ala Ala  
 100 105 110

<210> 5465  
 <211> 497  
 <212> DNA  
 <213> Homo sapiens

<400> 5465  
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 120  
 ggggtgctgct ggagggagga cagacggaca ggcggcctgg gtggccggcc ccagaaaggc  
 180  
 tggcgtggat gttcgagatg agccaccagc gaagccagta gggatgtctg ggccgtcctg  
 240  
 gtgggattgt ctgggacatc gccaccaaca cgggtgtcaga gccatcagtg gggacatcgg  
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 420  
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1725

<210> 5462  
<211> 159  
<212> PRT  
<213> Homo sapiens

<400> 5462  
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Leu Gly Ile Cys Tyr Asp Met Arg Phe Ala Glu Leu Ala Gln Ile Tyr  
35 40 45  
Ala Gln Arg Gly Cys Gln Leu Leu Val Tyr Pro Gly Ala Phe Asn Leu  
50 55 60  
Thr Thr Gly Pro Ala His Trp Glu Leu Leu Gln Arg Ser Arg Ala Val  
65 70 75 80  
Asp Asn Gln Val Tyr Val Ala Thr Ala Ser Pro Ala Arg Asp Asp Lys  
85 90 95  
Ala Ser Tyr Val Ala Trp Gly His Ser Thr Val Val Asn Pro Trp Gly  
100 105 110  
Glu Val Leu Ala Lys Ala Gly Thr Glu Glu Ala Ile Val Tyr Ser Asp  
115 120 125  
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130 135 140  
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145 150 155

<210> 5463  
<211> 792  
<212> DNA  
<213> Homo sapiens

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 1468

<210> 5460  
 <211> 155  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Met Thr Ala Gly Ala Met Ala Gly Ile Leu Glu His Ser Val Met Tyr  
 50 55 60  
 Pro Val Asp Ser Val Lys Thr Arg Met Gln Ser Leu Ser Pro Asp Pro  
 65 70 75 80  
 Lys Ala Gln Tyr Thr Ser Ile Tyr Gly Ala Leu Lys Lys Ile Met Gln  
 85 90 95  
 Thr Glu Gly Phe Trp Arg Pro Leu Arg Gly Val Asn Val Met Ile Met  
 100 105 110  
 Gly Ala Gly Pro Ala His Ala Met Tyr Phe Ala Cys Tyr Glu Asn Met  
 115 120 125  
 Lys Arg Thr Leu Asn Asp Val Phe His His Gln Gly Asn Ser His Leu  
 130 135 140  
 Ala Asn Gly Ile Leu Lys Ala Phe Val Trp Ser  
 145 150 155

<210> 5461  
 <211> 1725  
 <212> DNA  
 <213> Homo sapiens

<400> 5461  
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 60

<213> Homo sapiens

<400> 5458

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      20             25             30
Tyr Glu Asn Leu Pro Thr Ser Ala Ser Val Ser Thr His Met Thr Ala
      35             40             45
Gly Ala Met Ala Gly Ile Leu Glu His Ser Val Met Tyr Pro Val Asp
      50             55             60
Ser Val Lys Val Met Trp Thr Val Glu Leu Cys Ala Gly His Phe Gln
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Pro

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<210> 5459

<211> 1468

<212> DNA

<213> Homo sapiens

<400> 5459

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840
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960

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<210> 5456  
 <211> 149  
 <212> PRT  
 <213> Homo sapiens

<400> 5456  
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 Leu Tyr Gly Leu Ala Ser Phe Arg Pro Gly Val Gly Pro His Pro Thr  
 35 40 45  
 His Cys Pro Leu Ala Val Arg Leu Ala Cys Pro Ala Val Pro Thr Thr  
 50 55 60  
 Val Val Lys Gln Arg Leu Gln Met Tyr Asn Ser Gln His Arg Ser Ala  
 65 70 75 80  
 Ile Ser Cys Ile Arg Thr Val Trp Arg Thr Glu Gly Leu Gly Ala Phe  
 85 90 95  
 Tyr Arg Ser Tyr Thr Thr Gln Leu Thr Met Asn Ile Pro Phe Gln Ser  
 100 105 110  
 Ile His Phe Ile Thr Tyr Glu Phe Leu Gln Glu Gln Val Asn Pro His  
 115 120 125  
 Arg Thr Tyr Asn Pro Gln Ser His Ile Ile Ser Gly Gly Leu Ala Gly  
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 145

<210> 5457  
 <211> 448  
 <212> DNA  
 <213> Homo sapiens

<400> 5457  
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<210> 5458  
 <211> 81  
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	245	250
Gln Leu Val Gln Ala Leu Arg	Ala Thr Pro Asp Pro Asp Pro Glu Asp	255
	260	265
Arg Gly Pro Arg Pro Gly Ser	Pro Ser Ala Leu Leu Pro Gly Pro Gly	270
	275	280
Arg Pro Pro Pro Pro Pro Thr	Lys Pro Pro Glu Thr Glu Ala Gln Arg	285
	290	295
Gly Pro Cys Leu Gln Trp Leu	Ser Glu Trp Thr Leu Glu Pro Asp Ser	300
305	310	315
		320

&lt;210&gt; 5455

&lt;211&gt; 975

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5455

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960
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975

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 1920  
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 1974

&lt;210&gt; 5454

&lt;211&gt; 320

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5454

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Arg	Ile	Asp	Ser	Lys	Ala	Trp	Arg	Glu	Thr	Leu	Thr	Leu	Gln	Lys	Gln
	35						40					45			
Leu	Arg	Tyr	Arg	Phe	Pro	Glu	Leu	Ala	Asp	Pro	Asp	Thr	Cys	Tyr	Gly
	50					55				60					
Phe	Arg	Phe	Cys	His	Gln	Leu	Asp	Phe	Ser	Thr	Ser	Gly	Ala	Leu	Cys
	65				70					75				80	
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			85					90					95		
Glu	Arg	Arg	Val	Thr	Lys	Ala	Tyr	Leu	Ala	Leu	Leu	Arg	Gly	His	Ile
			100					105					110		
Gln	Glu	Ser	Arg	Val	Thr	Ile	Ser	His	Ala	Ile	Gly	Arg	Asn	Ser	Thr
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Glu	Gly	Arg	Ala	His	Thr	Met	Cys	Ile	Glu	Gly	Ser	Gln	Gly	Val	Ala
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Gly	Cys	Glu	Asn	Pro	Lys	Pro	Ser	Leu	Thr	Asp	Leu	Val	Val	Leu	Glu
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Leu	Thr	Gly	Arg	Thr	His	Gln	Leu	Arg	Val	His	Cys	Ser	Ala	Leu	Gly
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His	Pro	Val	Val	Gly	Asp	Leu	Thr	Tyr	Gly	Glu	Val	Ser	Gly	Arg	Glu
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195

200

205

&lt;210&gt; 5453

&lt;211&gt; 1974

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5453

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 1184

&lt;210&gt; 5452

&lt;211&gt; 206

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5452

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Arg	Lys	Gly	Ser	His	Leu	Leu	Ser	Leu	Ala	Glu	Pro	Leu	Pro	Pro	Tyr
			20					25					30		
Ser	Ser	Pro	Glu	Leu	Ser	Val	Ala	Phe	His	His	Ser	Gly	Pro	Ser	Cys
		35					40					45			
Leu	Ser	Pro	Ala	Leu	Ser	Gln	Thr	Thr	Gln	Lys	Ser	Gly	His	Leu	Trp
		50				55					60				
Ala	Pro	Gly	Met	Val	Thr	Glu	Glu	Lys	His	Ala	Val	Pro	Val	Ser	Pro
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Gly	Phe	Cys	Gln	Lys	Ile	Glu	Gln	Val	Gln	Leu	Thr	His	Cys	Tyr	Cys
			85					90					95		
Arg	Ser	Leu	Lys	Leu	Pro	Gly	Leu	Val	Leu	Asp	Pro	Ser	Arg	Asn	His
		100					105						110		
Gln	Val	Arg	His	Leu	Glu	Pro	Pro	Gly	Glu	Gly	Pro	Pro	Ser	Arg	Ala
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Leu	Lys	Glu	Leu	His	Glu	Ile	Arg	Asn	Cys	Leu	Met	Lys	Cys	Ile	Ser
	130					135					140				
Leu	Tyr	Leu	Glu	Asp	Glu	Ala	Gln	Thr	Pro	Thr	Pro	Leu	Ser	Pro	Pro
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			165					170					175		
Leu	Gly	Glu	Val	Gly	Ala	Gly	Thr	Ile	Ser	Val	Pro	Ser	Thr	Leu	Thr
		180					185						190		
Pro	Ser	Thr	Ser	Glu	Thr	Thr	Leu	Pro	Gln	Pro	Asp	Thr	Glu		

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Val Lys Pro Ser Thr Pro Ser Pro Ser His Glu Ser Ser Ser Ser
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Gly Ser Asp Glu Gly Thr Glu Tyr Tyr Pro His Leu Val Phe Phe Gln
          130          135          140
Asn Lys Ala Arg Arg Glu Asp Phe Cys Pro Arg Lys Leu Arg Gln Met
145          150          155          160
His Leu Met Ile Asp Gln Leu Met Ala His Ser His Leu Arg Tyr Lys
          165          170          175
Gly Thr Leu Ser Met Leu Gln Cys Asn Val Phe Pro Gly Leu Pro Pro
          180          185          190
Asp Phe Leu Asp Ser Glu Val Asn Leu Phe Leu Val Pro Phe Met Asp
          195          200          205
Ser Glu Ala Glu Ser Glu Asn Pro Pro Arg Ala Gly Pro Gly Ser Ser
          210          215          220
Pro Leu Phe Ser Leu Leu Pro Gly Tyr Arg Gly His Pro Ser Phe Gln
225          230          235          240
Ser Leu Val Ser Lys Leu Arg Ser Gln Val Met Ser Met Ala Arg Pro
          245          250          255
Gln Leu Ser His Thr Ile Leu Thr Glu Lys Asn Trp Phe His Tyr Ala
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Ala Arg Ile Trp Asp Gly Val Arg Lys Ser Ser Ala Leu Ala Glu Tyr
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Ser Arg Leu Leu Ala
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&lt;210&gt; 5451

&lt;211&gt; 1184

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5451

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<210> 5450

<211> 293

<212> PRT

<213> Homo sapiens

<400> 5450

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			20					25					30		
Ile	Thr	Gln	Glu	Arg	Ile	Val	Phe	Leu	Asp	Thr	Gln	Pro	Ile	Leu	Ser
			35				40					45			
Pro	Ser	Ile	Leu	Asp	His	Leu	Ile	Asn	Asn	Asp	Arg	Lys	Leu	Pro	Pro
	50					55					60				
Glu	Tyr	Asn	Leu	Pro	His	Thr	Tyr	Val	Glu	Met	Gln	Ser	Leu	Gln	Ile

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 <211> 189  
 <212> PRT  
 <213> Homo sapiens

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 Ala Leu His Ser Ala Leu Gly Gly Thr Lys Lys Lys Lys Lys Thr Ile  
 35 40 45  
 Val Thr Asp Val Phe Gln Gly Ser Met Arg Ile Phe Thr Lys Lys Leu  
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 Pro His Pro Asp Leu Pro Ala Glu Glu Lys Glu Gln Leu Leu His Asn  
 65 70 75 80  
 Asp Glu Tyr Gln Glu Thr Met Val Glu Ser Thr Phe Met Tyr Leu Thr  
 85 90 95  
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 Ile Ile Pro Gln Val Pro Leu Phe Asn Ile Leu Ala Lys Phe Asn Gly  
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<210> 5449  
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 <212> DNA  
 <213> Homo sapiens

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 180  
 aaactgcctc cagagtacaa ccttccccac acttacgttg aaatgcagtc actccagatt  
 240

65		70		75		80									
His	Ala	Asp	Ser	Asp	Met	Arg	Ala	His	Ser	Leu	Ser	His	Asp	Ser	Gln
				85					90					95	
Thr	Val	Glu	Thr	Arg	Gln	Val	Gly	Leu	Gly	Cys					
				100				105							

&lt;210&gt; 5447

&lt;211&gt; 1444

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5447

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180
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240
aagaaaaaga agactattgt gactgatgtt ttccaggggt ccatgaggat cttcactaaa
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&lt;210&gt; 5446

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5446

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 Arg Lys Thr Gly Trp Arg Phe Leu Arg Arg Ser Thr His Ser Arg His  
 35 40 45  
 Gly Thr Gln Trp Phe His Pro Gln Val Cys Ser Asn Arg His His Ser  
 50 55 60  
 Pro Arg Pro His Ala Asp Ser Asp Thr Arg Ala His Ser Pro Arg Ser



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 2021

&lt;210&gt; 5444

&lt;211&gt; 438

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5444

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 Lys Ile Arg Leu Arg Cys Gln Lys Gly Ile Pro Pro Ser Leu Arg Gly  
 35 40 45  
 Arg Ala Trp Gln Tyr Leu Ser Gly Gly Lys Val Lys Leu Gln Gln Asn  
 50 55 60  
 Pro Gly Lys Phe Asp Glu Leu Asp Met Ser Pro Gly Asp Pro Lys Trp  
 65 70 75 80  
 Leu Asp Val Ile Glu Arg Asp Leu His Arg Gln Phe Pro Phe His Glu

130 135 140  
 Lys Thr Asn Lys Ser Thr Lys Gln Gln Ala Leu Glu Val Ile Lys Gln  
 145 150 155 160  
 Leu Lys Glu Lys Met Lys Ile Glu Arg Ala His Met Arg Leu Arg Phe  
 165 170 175  
 Ile Leu Pro Val Asn Glu Gly Lys Lys Leu Lys Glu Lys Leu Lys Pro  
 180 185 190  
 Leu Ile Lys Val Ile Glu Ser Glu Asp Tyr Gly Gln Gln Leu Glu Ile  
 195 200 205  
 Val Cys Leu Ile Asp Pro Gly Cys Phe Arg Glu Ile Asp Glu Leu Ile  
 210 215 220  
 Lys Lys Glu Thr Lys Gly Lys Gly Ser Leu Glu Val Leu Asn Leu Lys  
 225 230 235 240  
 Asp Val Glu Glu Gly Asp Glu Lys Phe Glu  
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&lt;210&gt; 5443

&lt;211&gt; 2021

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5443

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&lt;210&gt; 5442

&lt;211&gt; 250

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5442

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			20					25					30		
Lys	Asn	Lys	Val	Val	Gly	Trp	Arg	Ser	Gly	Val	Glu	Lys	Asp	Leu	Asp
		35				40						45			
Glu	Val	Leu	Gln	Thr	His	Ser	Val	Phe	Val	Asn	Val	Ser	Lys	Gly	Gln
	50					55				60					
Val	Ala	Lys	Lys	Glu	Asp	Leu	Ile	Ser	Ala	Phe	Gly	Thr	Asp	Asp	Gln
65					70					75				80	
Thr	Glu	Ile	Cys	Lys	Gln	Ile	Leu	Thr	Lys	Gly	Glu	Val	Gln	Val	Ser
			85						90				95		
Asp	Lys	Glu	Arg	His	Thr	Gln	Leu	Glu	Gln	Met	Phe	Arg	Asp	Ile	Ala
			100					105					110		
Thr	Ile	Val	Ala	Asp	Lys	Cys	Val	Asn	Pro	Glu	Thr	Lys	Arg	Pro	Tyr
		115					120						125		
Thr	Val	Ile	Leu	Ile	Glu	Arg	Ala	Met	Lys	Asp	Ile	His	Tyr	Ser	Val

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305	310	315
Thr Lys Tyr Met Asp Val Val Lys Glu Arg Ile Arg Leu Ala Arg Gln		320
	325	330
Ile Glu Lys Ser Glu Tyr Arg Asn Phe Gln Ala Cys Leu His Asn Ser		335
	340	345
Trp Ile Glu Gln Ala Ala Ala Ala Leu Glu Ile Glu Leu Glu Glu Asp		350
	355	360
Met Tyr Lys Gly Gly Lys Ala Asp Gln Gln Glu Glu Arg Arg Arg Gln		365
	370	375
Lys Gln Met Lys Val Leu Lys Lys Glu Leu Arg His Leu Leu Ser Gln		380
385	390	395
Pro Leu Phe Thr Glu Ser Gln Lys Thr Lys Tyr Pro Thr Gln Ser Gly		400
	405	410
Lys Pro Pro Leu Leu Val Ser Ala Pro Ser Lys Ser Glu Ser Ala Leu		415
	420	425
Ser Cys Leu Ser Lys Gln Lys Lys Lys Lys Thr Lys Lys Pro Lys Glu		430
	435	440
Pro Gln Pro Glu Gln Pro Gln Pro Ser Thr Ser Ala Asn		445
450	455	460

&lt;210&gt; 5441

&lt;211&gt; 1635

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5441

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<211> 461

<212> PRT

<213> Homo sapiens

<400> 5440

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&lt;210&gt; 5439

&lt;211&gt; 4234

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5439

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<211> 245

<212> PRT

<213> Homo sapiens

<400> 5438

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			20				25						30	
Leu	Gln	Val	Val	Arg	Glu	Gly	Lys	Phe	Ser	Gly	Phe	Leu	Thr	Ser
			35				40						45	
Ser	Leu	Leu	Leu	Pro	Arg	Ala	Ala	Gln	Ile	Leu	Ala	Ala	Glu	Ala
			50				55						60	
Leu	Pro	Ser	Ser	Arg	Ser	Phe	Met	Gly	Phe	Ala	Ala	Pro	Phe	Thr
														Asn

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&lt;210&gt; 5436

&lt;211&gt; 119

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5436

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 Gly Thr Ile Arg Ala Asn Leu Tyr Phe Lys Ile Leu Gln Pro Lys Met  
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 Lys Asn Asn His Ile Arg Ser Cys Arg Ala Val Leu His Arg Ser Asp  
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&lt;210&gt; 5437

&lt;211&gt; 1422

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5437

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&lt;400&gt; 5433

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&lt;210&gt; 5434

&lt;211&gt; 128

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5434

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			20					25				30			
Asn	Ile	Pro	Ala	Ala	Met	Thr	His	Leu	Gly	Ile	Arg	Ser	Ser	Ser	Gly
		35				40					45				
Leu	Gln	Ser	Ser	Arg	Ser	Asn	Pro	Ser	Ile	Gln	Ala	Thr	Leu	Asn	Lys
	50				55					60					
Thr	Val	Leu	Ser	Ser	Ser	Leu	Asn	Asn	His	Pro	Gln	Thr	Ser	Val	Pro
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Asn	Ala	Ser	Ala	Leu	His	Pro	Ser	Leu	Arg	Leu	Phe	Ser	Leu	Ser	Asn
			85					90					95		
Pro	Ser	Leu	Ser	Thr	Thr	Asn	Leu	Ser	Gly	Pro	Ser	Arg	Arg	Arg	Gln
		100					105					110			
Pro	Pro	Val	Ser	Pro	Leu	Thr	Leu	Ser	Pro	Gly	Pro	Glu	Ala	His	Gln
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&lt;210&gt; 5435

&lt;211&gt; 617

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5435

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240

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 Arg Gly Glu Asn Leu Tyr Tyr Glu Ile Gly Ala Ser Glu Gly Ser Pro  
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 Tyr Ser Gly Pro Thr Arg Ser Trp Ser Pro Phe Arg Ser Met Pro Pro  
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 Asp Arg Leu Asn Ala Ser Tyr Gly Met Leu Gly Gln Ser Pro Pro Leu  
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 His Arg Ser Pro Asp Phe Leu Leu Ser Tyr Pro Pro Ala Pro Ser Cys  
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 Pro Arg Ser Arg Ser Asp Pro Gly Pro Pro Val Pro Arg Leu Pro Gln  
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 Lys Gln Arg Ala Pro Trp Gly Pro Arg Thr Pro His Arg Val Pro Gly  
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&lt;210&gt; 5433

&lt;211&gt; 385

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

```

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Phe Arg Glu Val Arg Val Gln Ser Val Val Val Glu Phe Leu Leu Thr
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His Val Asp Val Leu Phe Ser Asp Thr Phe Thr Ser Ala Gly Leu Asp
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Pro Ala Gly Arg Cys Leu Leu Pro Arg Pro Lys Ser Leu Ala Gly Ser
      100              105              110
Cys Pro Ser Thr Arg Leu Leu Thr Leu Glu Glu Ala Gln Ala Arg Thr
      115              120              125
Gln Gly Arg Leu Gly Thr Pro Thr Glu Pro Thr Thr Pro Lys Ala Pro
      130              135              140
Ala Ser Pro Ala Glu Arg Arg Lys Gly Glu Arg Gly Glu Lys Gln Arg
  145              150              155              160
Lys Pro Gly Gly Ser Ser Trp Lys Thr Phe Phe Ala Leu Gly Arg Gly
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Pro Ser Val Pro Arg Lys Lys Pro Leu Pro Trp Leu Gly Gly Thr Arg
      180              185              190
Ala Pro Pro Gln Pro Ser Gly Ser Arg Pro Asp Thr Val Thr Leu Arg
      195              200              205
Ser Ala Lys Ser Glu Glu Ser Leu Ser Ser Gln Ala Ser Gly Ala Gly
      210              215              220
Leu Gln Arg Leu His Arg Leu Arg Arg Pro His Ser Ser Ser Asp Ala
  225              230              235              240
Phe Pro Val Gly Pro Ala Pro Ala Gly Ser Cys Glu Ser Leu Ser Ser
      245              250              255
Ser Ser Ser Ser Glu Ser Ser Ser Ser Glu Ser Ser Ser Ser Ser Ser
      260              265              270
Glu Ser Ser Ala Ala Gly Leu Gly Ala Leu Ser Gly Ser Pro Ser His
      275              280              285
Arg Thr Ser Ala Trp Leu Asp Asp Gly Asp Glu Leu Asp Phe Ser Pro
      290              295              300
Pro Arg Cys Leu Glu Gly Leu Arg Gly Leu Asp Phe Asp Pro Leu Thr
  305              310              315              320
Phe Arg Cys Ser Ser Pro Thr Pro Gly Asp Pro Ala Pro Pro Ala Ser
      325              330              335
Pro Ala Pro Pro Ala Pro Ala Ser Ala Phe Pro Pro Arg Val Thr Pro
      340              345              350
Gln Ala Ile Ser Pro Arg Gly Pro Thr Ser Pro Ala Ser Pro Ala Ala
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  385              390              395              400
Ala Leu Ser Pro Gly Arg Ser Leu Arg Pro His Leu Ile Pro Leu Leu
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Leu Arg Gly Ala Glu Ala Pro Leu Thr Asp Ala Cys Gln Gln Glu Met
      420              425              430
Cys Ser Lys Leu Arg Gly Ala Gln Gly Pro Leu Gly Pro Asp Met Glu
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      450              455              460
Pro Pro Pro Pro Pro Lys Asn Pro Ala Arg Leu Met Ala Leu Ala Leu

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&lt;210&gt; 5432

&lt;211&gt; 863

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5432

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 Glu Tyr Leu Leu Arg His Leu Ala Arg Met Ala Arg His Ser Ala Asn  
 20 25 30  
 Thr Ser Met His Ala Arg Asn Leu Ala Ile Val Trp Ala Pro Asn Leu

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&lt;210&gt; 5430

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5430

Pro	Ala	Gly	Gly	Lys	Ala	Pro	Gly	Gln	His	Gly	Gly	Phe	Val	Val	Thr
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Val	Lys	Gln	Glu	Arg	Gly	Glu	Gly	Pro	Arg	Ala	Gly	Glu	Lys	Gly	Ser
		20					25					30			
His	Glu	Glu	Glu	Val	Arg	Val	Pro	Ala	Leu	Ser	Trp	Gly	Arg	Pro	Arg
	35					40					45				
Ala	Pro	Ala	Pro	Ala	Ser	Lys	Pro	Arg	Pro	Arg	Leu	Asp	Leu	Asn	Cys
	50				55					60					
Leu	Trp	Leu	Arg	Pro	Gln	Pro	Ile	Phe	Leu	Trp	Lys	Leu	Arg	Pro	Arg
65			70				75				80				
Pro	Val	Pro	Ala	Ala	Thr	Pro	Leu	Thr	Gly	Pro	Leu	Pro	Leu		
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&lt;210&gt; 5431

&lt;211&gt; 3005

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5431

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 aggcacctgg cccgcatggc gagacacagt gccaacacca gcatgcatgc ccgcaacctg  
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 gccattgtct gggcacccaa cctgctacgg tccatggagc tggagtcagt gggaatgggt  
 180

<400> 5429

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Glu Ser Pro Thr Asp Ala Thr Gln Glu Glu Asp Val Asp Asp Met Glu					
	515		520		525
Gly Ser Gly Glu Glu Gly Asp Leu Glu Gly Ser Asp Ser Glu Ala Ala					
	530		535		540
Gln Trp Ala Asp Gln Glu Gln Trp Phe Gly Met Ser Glu Gly Ala Ala					
545		550		555	560
Ala Pro Trp Pro Gln Trp Pro Ala Leu Leu					
	565		570		

&lt;210&gt; 5425

&lt;211&gt; 639

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5425

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 639

&lt;210&gt; 5426

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5426

Pro Gln Leu Cys His Gly Leu Val Gly Ser Trp Pro Ala Cys Ser Ala					
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Pro Ser Cys Ala Pro Ala Leu Leu Gly Ser Gly Cys Gly Ser Gly Glu					
	20		25		30
Ser Cys Asp Arg Gly Cys Leu Ala Ala Ile Leu Ala Ser Thr Ser Ala					
	35		40		45
Thr Gln Ala Arg Met Cys Pro Val Leu Arg Cys Cys Ser Glu Phe Ile					
	50		55		60
Glu Ala Xaa Gly Val Val Asp Gly Ile Tyr Arg Leu Ser Gly Val Ser					

65					70					75					80
Ala	Ser	Thr	Pro	Gln	Ser	Gln	Cys	Leu	Pro	Ser	Glu	Ile	Glu	Val	Lys
				85					90					95	
Tyr	Lys	Met	Ala	Glu	Cys	Tyr	Thr	Met	Leu	Lys	Gln	Asp	Lys	Asp	Ala
			100					105					110		
Ile	Ala	Ile	Leu	Asp	Gly	Ile	Pro	Ser	Arg	Gln	Arg	Thr	Pro	Lys	Ile
		115				120						125			
Asn	Met	Met	Leu	Ala	Asn	Leu	Tyr	Lys	Lys	Ala	Gly	Gln	Glu	Arg	Pro
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Ser	Val	Thr	Ser	Tyr	Lys	Glu	Val	Leu	Arg	Gln	Cys	Pro	Leu	Ala	Leu
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Asp	Ala	Ile	Leu	Gly	Leu	Leu	Ser	Leu	Ser	Val	Lys	Gly	Ala	Glu	Val
			165					170					175		
Ala	Ser	Met	Thr	Met	Asn	Val	Ile	Gln	Thr	Val	Pro	Asn	Leu	Asp	Trp
		180						185					190		
Leu	Ser	Val	Trp	Ile	Lys	Ala	Tyr	Ala	Phe	Val	His	Thr	Gly	Asp	Asn
		195				200					205				
Ser	Arg	Ala	Ile	Ser	Thr	Ile	Cys	Ser	Leu	Glu	Lys	Lys	Ser	Leu	Leu
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Arg	Asp	Asn	Val	Asp	Leu	Leu	Gly	Ser	Leu	Ala	Asp	Leu	Tyr	Phe	Arg
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Ala	Gly	Asp	Asn	Lys	Asn	Ser	Val	Leu	Lys	Phe	Glu	Gln	Ala	Gln	Met
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Phe	Asn	Ile	Ser	Asp	Gln	His	Ala	Glu	Pro	Trp	Val	Val	Ser	Gly	Cys
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His	Ser	Phe	Tyr	Ser	Lys	Arg	Tyr	Ser	Arg	Ala	Leu	Tyr	Leu	Gly	Ala
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			325						330					335	
Gly	Ala	Ala	Leu	Arg	Asn	Met	Gly	Arg	Val	Gln	Glu	Ala	Ile	Ile	His
		340					345						350		
Phe	Arg	Glu	Ala	Ile	Arg	Leu	Ala	Pro	Cys	Arg	Leu	Asp	Cys	Tyr	Glu
		355				360						365			
Gly	Leu	Ile	Glu	Cys	Tyr	Leu	Ala	Ser	Asn	Ser	Ile	Arg	Glu	Ala	Met
		370				375					380				
Val	Met	Ala	Asn	Asn	Val	Tyr	Lys	Thr	Leu	Gly	Ala	Asn	Ala	Gln	Thr
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Lys	Ala	Lys	Thr	Leu	Leu	Asp	Lys	Ala	Leu	Thr	Gln	Arg	Pro	Asp	Tyr
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Ile	Lys	Ala	Val	Val	Lys	Lys	Ala	Glu	Leu	Leu	Ser	Arg	Glu	Gln	Lys
		435					440					445			
Tyr	Glu	Asp	Gly	Ile	Ala	Leu	Leu	Arg	Asn	Ala	Leu	Ala	Asn	Gln	Ser
		450				455					460				
Asp	Cys	Val	Leu	His	Arg	Ile	Leu	Gly	Asp	Phe	Leu	Val	Ala	Val	Asn
465					470					475				480	
Glu	Tyr	Gln	Glu	Ala	Met	Asp	Gln	Tyr	Ser	Ile	Ala	Leu	Ser	Leu	Asp
				485					490					495	
Pro	Asn	Asp	Gln	Lys	Ser	Leu	Glu	Gly	Met	Gln	Lys	Met	Glu	Lys	Glu

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&lt;210&gt; 5424

&lt;211&gt; 570

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5424

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			20					25					30		
Lys	Tyr	Gln	Leu	Leu	Val	Tyr	His	Ala	Asp	Ser	Leu	Phe	His	Asp	Lys
		35					40					45			
Glu	Tyr	Arg	Asn	Ala	Val	Ser	Lys	Tyr	Thr	Met	Ala	Leu	Gln	Gln	Lys
		50					55				60				
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<210> 5423  
<211> 2427  
<212> DNA  
<213> Homo sapiens

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&lt;210&gt; 5422

&lt;211&gt; 276

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5422

Met	Pro	Val	Thr	Val	Thr	Arg	Thr	Thr	Ile	Thr	Thr	Thr	Thr	Ser
1				5					10				15	
Ser	Ser	Gly	Leu	Gly	Ser	Pro	Met	Ile	Val	Gly	Ser	Pro	Arg	Ala
			20					25					30	Leu
Thr	Gln	Pro	Leu	Gly	Leu	Leu	Arg	Leu	Leu	Gln	Leu	Val	Ser	Thr
			35				40					45		Cys
Val	Ala	Phe	Ser	Leu	Val	Ala	Ser	Val	Gly	Ala	Trp	Thr	Gly	Ser
			50				55				60			Met
Gly	Asn	Trp	Ser	Met	Phe	Thr	Trp	Cys	Phe	Cys	Phe	Ser	Val	Thr
					70					75				80
Ile	Ile	Leu	Ile	Val	Glu	Leu	Cys	Gly	Leu	Gln	Ala	Arg	Phe	Pro
				85					90					95
Ser	Trp	Arg	Asn	Phe	Pro	Ile	Thr	Phe	Ala	Cys	Tyr	Ala	Ala	Leu
					100				105				110	Phe
Cys	Leu	Ser	Ala	Ser	Ile	Ile	Tyr	Pro	Thr	Thr	Tyr	Val	Gln	Phe
					115				120				125	Leu
Ser	His	Gly	Arg	Ser	Arg	Asp	His	Ala	Ile	Ala	Ala	Thr	Phe	Phe
						135					140			Ser
Cys	Ile	Ala	Cys	Val	Ala	Tyr	Ala	Thr	Glu	Val	Ala	Trp	Thr	Arg
					150					155				160
Arg	Pro	Gly	Glu	Ile	Thr	Gly	Tyr	Met	Ala	Thr	Val	Pro	Gly	Leu
				165					170					175
Lys	Val	Leu	Glu	Thr	Phe	Val	Ala	Cys	Ile	Ile	Phe	Ala	Phe	Ile
				180					185				190	Ser
Asp	Pro	Asn	Leu	Tyr	Gln	His	Gln	Pro	Ala	Leu	Glu	Trp	Cys	Val
				195					200				205	Ala
Val	Tyr	Ala	Ile	Cys	Phe	Ile	Leu	Ala	Ala	Ile	Ala	Ile	Leu	Leu
				210			215				220			Asn
Leu	Gly	Glu	Cys	Thr	Asn	Val	Leu	Pro	Ile	Pro	Phe	Pro	Ser	Phe
					230					235				240
Ser	Gly	Leu	Ala	Leu	Cys	Leu	Ser	Ser	Ser	Met	Pro	Pro	Pro	Leu
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Ser	Gly	Pro	Ser	Thr	Ser	Ser	Met	Arg	Ser	Met	Ala	Ala	Ser	Leu
														Gly

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      35      40      45
Thr Arg Arg Tyr Tyr Arg Ser Pro Ser Arg Tyr Arg Ser Arg Ser Arg
      50      55      60
Ser Arg Ser Arg Ser Arg Gly Arg Ser Tyr Cys Gly Arg Ala Tyr Ala
65      70      75      80
Ile Ala Arg Gly Gln Arg Tyr Tyr Gly Phe Gly Arg Thr Val Tyr Pro
      85      90      95
Glu Glu His Ser Arg Trp Arg Asp Arg Ser Arg Thr Arg Ser Arg Ser
      100      105      110
Arg Thr Pro Phe Arg Leu Ser Glu Lys Asp Arg Met Glu Leu Leu Glu
      115      120      125
Ile Ala Lys Thr Asn Ala Ala Lys Ala Leu Gly Thr Thr Asn Ile Asp
      130      135      140
Leu Pro Ala Ser Leu Arg Thr Val Pro Ser Ala Lys Glu Thr Ser Arg
145      150      155      160
Gly Ile Gly Val Ser Ser Asn Gly Ala Lys Pro Glu Lys Ser
      165      170

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&lt;210&gt; 5421

&lt;211&gt; 1239

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5421

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<210> 5419  
 <211> 989  
 <212> DNA  
 <213> Homo sapiens

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<210> 5420  
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 <212> PRT  
 <213> Homo sapiens

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4602

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 1980  
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&lt;210&gt; 5418

&lt;211&gt; 528

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5418

Met Ala Ala Ile Asp Glu Glu Gly Gly Arg Glu Ile Gly Asp Glu Val  
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 Asn Ile Leu Val Lys Glu Gln Thr Gln Leu Gly Val Lys Thr Leu Met  
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 Arg Leu Leu Lys Glu Pro Glu Lys Glu Arg Asp Ser Asp Ser Asp Phe  
 35 40 45  
 Ser Pro Leu Gln Gln Thr Glu Gly Cys Gln Arg Arg Asp Lys His Phe  
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 Arg His Ala Glu Asn Pro His His Pro Leu Lys Thr Ser Ser Arg Ala

<210> 5416  
 <211> 55  
 <212> PRT  
 <213> Homo sapiens

<400> 5416  
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<210> 5417  
 <211> 2087  
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 <213> Homo sapiens

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 gacagtcca tcgagtacct gttggatcag actgatgtgt tgggtggttg tgtcctgggc  
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 960

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5415

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1440  
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1493

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 Ile Cys Ala Asn Ser Pro Ile Lys Ala Gln Gln Asp Gln Leu Gln Val  
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 Lys Asn Asn Ile Lys Ala Ser Leu His Asn Val Lys Ser Ser Leu Pro  
 50 55 60  
 Leu Phe Asn Thr Lys Ser Ser Thr Ser Val Gly Gln Leu Gln Ser Pro  
 65 70 75 80  
 Thr Leu Asn Ser Pro Ile Tyr Met Gln Lys Gln Gly Lys Asn Glu His  
 85 90 95  
 Leu Ala Phe Asn Thr Lys Ser Lys Ala Ser Thr Val Gly Ser Glu Leu  
 100 105 110  
 Val Leu Val Ser Thr Thr Val Pro Thr Val His His Val Ser Asp Leu  
 115 120 125  
 Glu Met Ser Ser Thr Leu Asp Cys Leu Pro Val Leu Ala Asp Trp Glu  
 130 135 140  
 Asp Val Val Leu Leu Pro Ala Ser Gln Pro Glu Glu Asn Val Asp Cys  
 145 150 155 160  
 Thr Val Pro Ile Ser Asp Ser Asp Leu Glu Ile Ser Phe Asn Ser Gly  
 165 170 175  
 Glu Arg Leu Met Val Leu Lys Glu Leu Glu Met Ser Ser His Glu Asn  
 180 185 190  
 Phe Gly Asp Ile Glu Glu Thr Pro Gln Lys Ser Glu Thr Ser Lys Ser  
 195 200 205  
 Ile Val Tyr Lys Ser Pro His Thr Thr Ile Tyr Asn Val Lys Glu Ala  
 210 215 220  
 Lys Asp Pro Gly Ser Asp Ile Ser Ala Phe Lys Leu Pro Glu His Lys  
 225 230 235 240  
 Ser Ser Thr Phe Asn Arg Val Asn Ala Asn Met Ser His Pro Leu Val  
 245 250 255  
 Leu Gly Lys His Pro Leu Leu Ser Gly Gly Thr Lys Arg Asn Pro Cys  
 260 265 270  
 Ser Pro Gln Ala Phe Pro Pro Ala Lys Lys Gln Pro Phe Thr Ile His  
 275 280 285  
 Glu Glu Lys Pro Thr Ser Ser Asp Cys Ser Pro Val Arg Ser Ser Ser  
 290 295 300  
 Trp Arg Arg Leu Pro Ser Ile Leu Thr Ser Thr Val Asn Leu Gln Glu  
 305 310 315 320  
 Pro Trp Lys Ser Gly Lys Met Thr Pro Pro Leu Cys Lys Cys Gly Arg  
 325 330 335  
 Arg Ser Lys Arg Leu Val Val Ser Asn Asn Gly Pro Asn His Gly Lys  
 340 345 350  
 Val Phe Tyr Cys Cys Pro Ile Gly Lys Tyr Gln Glu Asn Arg Lys Cys  
 355 360 365  
 Cys Gly Tyr Phe Lys Trp Glu Gln Thr Leu Gln Lys Glu Arg Ala Asn  
 370 375 380  
 Ser Met Val Pro Ser His Ser Thr Gly Gly Leu Thr Phe Ser Ser Pro  
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 Glu Thr Ser His Ile Cys Asp Arg Asn Leu Ser Ile Ser Thr Lys Asn  
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 Ser Leu Arg Leu Arg Pro Ser Met Arg Asn  
 420 425

&lt;210&gt; 5415

&lt;211&gt; 1493

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 1677

&lt;210&gt; 5414

&lt;211&gt; 426

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5414

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 Glu Pro Lys Asn Ile Ile Asn Pro His Glu Lys Val Gln Met Lys Ser

370                      375                      380  
 Glu Gln Val Ile Asn Asn Ile Leu Glu Glu Arg Leu Ala Pro Thr Leu  
 385                      390                      395                      400  
 Ser Gln Leu Asp Arg Asn Leu Asp Arg Glu Met Lys Pro Asp Pro Thr  
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 Pro Leu Leu Thr Ser Arg His Asn Val Phe Gln Asn Asp Glu Phe Asp  
                     420                      425                      430  
 Val Phe Ser Arg Asp Ser Val Asp Leu Ser Arg Val His Lys Gly Lys  
                     435                      440                      445  
 Ser Thr Arg Lys Glu Glu Asn Thr Arg Ser Leu Leu Asn Asp Lys Arg  
                     450                      455                      460  
 Ala Val Ala Ala Gln Arg Gln Arg Tyr Glu Gln Tyr Ser Val Val Val  
 465                      470                      475                      480  
 Glu Glu Val Pro Leu Gln Pro Gly Glu Ser Leu Pro Tyr His Ser Val  
                     485                      490                      495  
 Tyr Tyr Glu Asp Glu Tyr Asp Asp Thr Tyr Asp Gly Asn Gln Val Gly  
                     500                      505                      510  
 Ala Asn Asp Ala Asp Ser Met Thr Ser Ser Ser Ala Ala Gly His Ser  
                     515                      520                      525  
 Pro Ser Gln Val Leu Arg Thr Lys Val Pro Arg Glu Gly Gln Glu Glu  
                     530                      535                      540  
 Asp Asp Asp Asp Glu Glu Asp Asp Ala Asp Glu Glu Ala Pro Lys Pro  
 545                      550                      555                      560  
 Asp His Phe Val Gln Asp Pro Ala Val Leu Arg Glu Lys Ala Glu Ala  
                     565                      570                      575  
 Arg Arg Met Ala Phe Leu Ala Lys Lys Gly Tyr Arg His Asp Ser Ser  
                     580                      585                      590  
 Thr Ala Val Ala Gly Ser Pro Arg Gly His Gly Gln Ser Arg Glu Thr  
                     595                      600                      605  
 Thr Gln Glu Arg Arg Lys Lys Glu Ala Asn Lys Ala Thr Arg Ala Asn  
                     610                      615                      620  
 His Asn Arg Arg Thr Met Ala Asp Arg Lys Arg Ser Lys Gly Met Ile  
 625                      630                      635                      640  
 Pro Ser

&lt;210&gt; 5413

&lt;211&gt; 1677

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5413

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 tgtgtgcagt catttataaa tcaatgacat ttctcttttt tgtcataaaa ctgtatactg  
 180  
 aagaaattaa cgaatgcaca gtttctaaag ctgttgcatt tgtctgtgga atcataggtt  
 240  
 cccactaaga agaatttcag cattctggcc agaaatttga atacaattca agttgaagaa  
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&lt;210&gt; 5412

&lt;211&gt; 642

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5412

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Met Gln Lys Arg Leu His Arg Ser Val Phe Leu Thr Phe Leu Arg Met
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Ser Thr His Lys Glu Ser Lys Asp His Phe Ile Ser Pro Ser Ala Phe
          20           25           30
Gly Glu Ile Leu Tyr Asn Asn Phe Leu Phe Asp Ile Pro Lys Ile Leu
          35           40           45
Asp Leu Cys Val Leu Phe Gly Lys Gly Asn Ser Pro Leu Leu Gln Lys
          50           55           60
Met Ile Gly Asn Ile Phe Thr Gln Gln Pro Ser Tyr Tyr Ser Asp Leu
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His Cys Gly Leu Gln Gly Asp Gly Ala Asn Thr Thr Pro Gln Lys Leu
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Lys Asp Ile Val Leu Tyr Leu Cys Asp Thr Cys Thr Thr Leu Trp Ala
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Glu Ser Ala Ile Lys Lys Arg Arg Leu Glu Asp Ser Lys Leu Leu Gly
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Ser Cys Asp Asn Ile Gln Gly Phe Ile Glu Glu Phe Leu Gln Ile Phe
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Ser Ser Leu Leu Gln Glu Lys Arg Phe Leu Arg Asp Tyr Asp Ala Leu
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Trp Glu Gly Val Asp Arg Arg Lys Ala Thr Asp Ala Lys Asp Pro Ser
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<212> DNA
<213> Homo sapiens

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 2019

&lt;210&gt; 5410

&lt;211&gt; 198

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5410

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Phe	Gln	Glu	Ala	Val	Lys	Asn	Phe	Phe	Pro	Pro	Gly	Asn	Glu	Val	Val
65					70				75					80	
Asn	Gly	Glu	Asn	Leu	Ser	Phe	Ala	Tyr	Glu	Phe	Lys	Ala	Asp	Ala	Leu
			85					90					95		
Phe	Asp	Phe	Phe	Tyr	Trp	Phe	Gly	Leu	Ser	Asn	Ser	Val	Val	Lys	Val
			100				105					110			
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			115				120				125				
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Ala	Ala Thr Ser Asp Met	Asp Ile Gly Lys Arg	Lys Ile Met Cys Val		
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&lt;210&gt; 5409

&lt;211&gt; 2019

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5409

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<211> 335

<212> PRT

<213> Homo sapiens

<400> 5408

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Arg	Ile	Phe	Phe	Ala	Met	Val	Asp	Phe	Asp	Glu	Gly	Ser	Asp	Val	Phe
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1080  
tgaagtgact gctaccoggt tgccatctgt tgaacagact tttggatgaa gtgtgttggg  
1140  
gaagaggata aggttatatc taggacaact ctttgagttg gtccttcata taagaatcgt  
1200  
gacggtaaga gaataaacac ttgtactggg atcagaatac atgatggatg aaattcttta  
1260  
catgttttag cagaatgaat ttgtttaata taataaagtt tgctacttat ctgtatgtag  
1320  
gttgctaaaa aggattttct taactcagat tttaagccaa ataaccattt aacactagta  
1380  
tttgttaaat ggggtatttt tctgtatttg tatgtttcac tataataagg gaattaagga  
1440  
taatgtgcat tgagaatatt ttgaaaaata attgactcaa attttatttc ttggtctttt  
1500  
gctgtttaaa tgatgatttt gaaagattaa acctgtactg ttggtattgt gttagtgtat  
1560  
ggaccaatac tgctgtaat aaagatttta tatataaaaa aaaaaaaaaa  
1609

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5403

gcgccttccc cctcgacggc gccagctcct cggcctctag ctccaggatg tgctcgtccg  
 60  
 cacgcgctag ttcgcgctgc tggatcaggc tcaggatctc cagcactgac aatggctcct  
 120  
 tcattctttgg gggctctggg accttgggtg ggggctctgg agctgcctcg cctgcaggca  
 180  
 ccactctctc agccaggggac gcacgctggg gctntggatc cagcctccag tctcaggaag  
 240  
 gccagtctcc gggcggcctc ccccgtgcc tctcgtcgc cgtgggctcg ggtcccatgc  
 300  
 agccggggcca ggaggccaaa atctgctgag ctctgcgta tccctggtac cagcacacgg  
 360  
 cccaagaaag agcggggctg cccatcccca gggctgcctg ccgccggccc gggggccagc  
 420  
 ccagccggaa gggggccagg cccgcaagct t  
 451

&lt;210&gt; 5404

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5404

Ala	Pro	Ser	Pro	Ser	Thr	Ala	Pro	Ala	Pro	Arg	Pro	Leu	Ala	Pro	Gly
1				5					10					15	
Cys	Ala	Arg	Pro	His	Ala	Leu	Val	Arg	Ala	Ala	Gly	Ser	Gly	Ser	Gly
			20					25					30		
Ser	Pro	Ala	Leu	Thr	Met	Ala	Pro	Ser	Ser	Leu	Gly	Ala	Leu	Gly	Pro
		35					40					45			
Trp	Val	Gly	Ala	Leu	Glu	Leu	Pro	Arg	Leu	Gln	Ala	Pro	Leu	Ser	Gln
	50					55				60					
Pro	Gly	Thr	His	Ala	Gly	Ala	Xaa	Asp	Pro	Arg	Pro	Ser	Leu	Arg	Lys
65					70				75					80	
Ala	Ser	Leu	Arg	Ala	Ala	Ser	Pro	Ala	Ala	Ser	Ser	Ser	Pro	Trp	Ala
			85					90					95		
Arg	Val	Pro	Cys	Ser	Arg	Ala	Arg	Arg	Pro	Lys	Ser	Ala	Glu	Leu	Leu
		100						105					110		
Arg	Ile	Pro	Gly	Thr	Ser	Thr	Arg	Pro	Lys	Lys	Glu	Arg	Gly	Cys	Pro
		115					120					125			
Ser	Pro	Gly	Leu	Pro	Ala	Ala	Gly	Pro	Gly	Pro	Ser	Pro	Ala	Gly	Arg
	130					135					140				
Gly	Pro	Gly	Pro	Gln	Ala										
145					150										

&lt;210&gt; 5405

&lt;211&gt; 1609

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5405

100	105	110
Leu Thr Asp Ala Ser Ala Cys Lys Asn Ile Leu Arg Phe Ile Gln Phe		
115	120	125
Glu Pro Glu Glu Asp Ile Lys Arg Lys Phe Met Arg Lys Lys Asp Lys		
130	135	140
Lys Leu Ser Asp Met His Gln Ile Val Asn Ile Asp Leu Met Leu Glu		
145	150	155
Met Ser Thr Ser Leu Ala Ala Val Thr Pro Ile Ile Glu Arg Glu Ser		
165	170	175
Gly Gly His His Tyr Val Asn Met Thr Leu Pro Val Asp Ala Val Ile		
180	185	190
Ser Val Ala Pro Glu Glu Thr Trp Gly Lys Val Arg Lys Leu Leu Val		
195	200	205
Asp Ala Ile His Asn Gln Leu Thr Asp Met Glu Lys Cys Ile Leu Lys		
210	215	220
Tyr Met Lys Arg Thr Ser Ile Val Val Pro Glu Pro Leu His Phe Leu		
225	230	235
Leu Pro Gly Lys Lys Asn Leu Val Thr Ile Ser Tyr Pro Ser Gly Ile		
245	250	255
Pro Asp Gly Gln Leu Gln Ala Tyr Arg Lys Glu Leu His Asp Leu Phe		
260	265	270
Asn Leu Pro His Asp Arg Pro Tyr Phe Lys Arg Ser Asn Ala Tyr His		
275	280	285
Phe Pro Asp Glu Pro Tyr Lys Asp Gly Tyr Ile Arg Asn Pro His Thr		
290	295	300
Tyr Leu Asn Pro Pro Asn Met Glu Thr Gly Met Ile Tyr Val Val Gln		
305	310	315
Gly Ile Tyr Gly Tyr His His Tyr Met Gln Asp Arg Ile Asp Asp Asn		
325	330	335
Gly Trp Gly Cys Ala Tyr Arg Ser Leu Gln Thr Ile Cys Ser Trp Phe		
340	345	350
Lys His Gln Gly Tyr Thr Glu Arg Ser Ile Pro Thr His Arg Glu Ile		
355	360	365
Gln Gln Ala Leu Val Asp Ala Gly Asp Lys Pro Ala Thr Phe Val Gly		
370	375	380
Ser Arg Gln Trp Ile Gly Ser Ile Glu Val Gln Leu Val Leu Asn Gln		
385	390	395
Leu Ile Gly Ile Thr Ser Lys Ile Leu Phe Val Ser Gln Gly Ser Glu		
405	410	415
Ile Ala Ser Gln Gly Arg Glu Leu Ala Asn His Phe Gln Ser Glu Gly		
420	425	430
Thr Pro Val Met Ile Gly Gly Gly Val Leu Ala His Thr Ile Leu Gly		
435	440	445
Val Ala Trp Asn Glu Ile Thr Gly Gln Ile Lys Phe Leu Ile Leu Asp		
450	455	460
Pro His Tyr Thr Gly Ala Glu Asp Leu Gln Val Ile Leu Glu Lys Gly		
465	470	475
Trp Cys Gly Trp Lys Gly Pro Asp Phe Trp Asn Lys Asp Ala Tyr Tyr		
485	490	495
Asn Leu Cys Leu Pro Gln Arg Pro Asn Met Ile		
500	505	

&lt;210&gt; 5403

&lt;211&gt; 451

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 1740  
 aatacatgtg ttcttaaagt gatcttcact tggaagaaag tttttcgtcc ttctcagaag  
 1800  
 gagattagac acaacatatg gtaaagccaa aagcaggagc ttatagattt gcatgaaatg  
 1860  
 aaggcggttct tcagacttct tcataaccca cgtgacatct gtttttaaaa acacgttaac  
 1920  
 attaaaaact tttttttaa aagagtttta tccccaaact tccaccatgc agtcccattt  
 1980  
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 2040  
 actactagaa atacgagtgt cagtattaaa tggaataata aatgctatgc aaacaagaga  
 2100  
 tcactgcggg agggaaaaag cagcagctct gagttactta ccagcacttc cttttccac  
 2160  
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 2220  
 tgtcagggtg ttcacttgct tttattgtct gcatacattt aattggtgta agaaacttgg  
 2280  
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 2340  
 ataaactgaa aacaggataa aaacggagtg aaatgaaaca ttgaacttaa gtctttttt  
 2400  
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 2460  
 aggatgcata aggaaattgc atttttggtc actattgtat cctcagcaac taacagaatc  
 2520  
 cagcatagag cgggcattcc agttctgaat gaatgttaga attatctgat gtttaataca  
 2580  
 gtgtatgagt acccaaaggt agtcaatggg aactatagaa tgggttttcc tgaaccgaaa  
 2640  
 ctgaagtaga atacagtcac aatgaacaaa attg  
 2674

&lt;210&gt; 5402

&lt;211&gt; 507

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5402

Xaa	Leu	Ser	Lys	Glu	Gly	Ala	Pro	Ala	Leu	Gly	Pro	Trp	Val	Thr	Pro
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Phe	Lys	Ala	Arg	Pro	Arg	Glu	Phe	Trp	Ala	Arg	Cys	Lys	Arg	Pro	Cys
			20					25					30		
Pro	Arg	His	Val	Ala	Asp	Met	Val	Ile	Ser	Glu	Ser	Met	Asp	Ile	Leu
		35					40					45			
Phe	Arg	Ile	Arg	Gly	Gly	Leu	Asp	Leu	Ala	Phe	Gln	Leu	Ala	Thr	Pro
	50					55					60				
Asn	Glu	Ile	Phe	Leu	Lys	Lys	Ala	Leu	Lys	His	Val	Leu	Ser	Asp	Leu
65					70					75				80	
Ser	Thr	Lys	Leu	Ser	Ser	Asn	Ala	Leu	Val	Phe	Arg	Ile	Cys	His	Ser
			85					90					95		
Ser	Val	Tyr	Ile	Trp	Pro	Ser	Ser	Asp	Ile	Asn	Thr	Ile	Pro	Gly	Glu

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180  
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240  
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300  
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360  
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420  
aagaaggaca aaaagttatc agacatgcat caaatagtaa atatagatct tatgctggaa  
480  
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540  
tatgttaata tgactttacc tgtcgatgca gttatatctg ttgctccaga agaaacatgg  
600  
ggaaaagttc gtaagctcct ggttgatgca attcataatc aactaactga catggaaaaa  
660  
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720  
ttaccaggga aaaaaaatct tgtaacaatt tcatatcctt caggaatacc agatggccag  
780  
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840  
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960  
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gcttatcgat ctctgcagac tatctgctct tggttcaaac atcagggata cacagagagg  
1080  
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1140  
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1200  
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1320  
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1380  
ctgattctag atccacatta taccggtgct gaagacctgc aagttatttt ggaaaagggc  
1440  
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1500  
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1560  
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1620  
accatttaaa ttatgacctt tttcaaaggt tgtaaatact gcacggagaa tgtattttta  
1680

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 480  
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 540  
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 600  
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 660  
 caatttttca aggtttacct tttaggagct ctgtagtctt ggataagtct atttcatgtg  
 720  
 tatatatctc tgttcagag tgtagacatc agttggaagg ttttatgcgg ctggtcgatt  
 780  
 ttgtgtgcag gtggttattg ctgccaaaaa gcaacagcct aaagaaagct caact  
 835

&lt;210&gt; 5400

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5400

Xaa Ala Ala Gln Gln Arg Ser His Pro Ala Met Ser Pro Gly Thr Pro  
 1 5 10 15  
 Gly Pro Thr Met Gly Arg Ser Gln Gly Ser Pro Met Asp Pro Met Val  
 20 25 30  
 Met Lys Arg Pro Gln Leu Tyr Gly Met Gly Ser Asn Pro His Ser Gln  
 35 40 45  
 Pro Gln Gln Ser Ser Pro Tyr Pro Gly Gly Ser Tyr Gly Pro Pro Gly  
 50 55 60  
 Pro Gln Arg Tyr Pro Ile Gly Ile Gln Gly Arg Thr Pro Gly Ala Met  
 65 70 75 80  
 Ala Gly Met Gln Tyr Pro Gln Gln Gln Met Pro Pro Gln Tyr Gly Gln  
 85 90 95  
 Gln Gly Val Ser Gly Tyr Cys Gln Gln Gly Gln Gln Pro Tyr Tyr Ser  
 100 105 110  
 Gln Gln Pro Gln Pro Pro His Leu Pro Pro Gln Ala Gln Tyr Leu Pro  
 115 120 125  
 Ser Gln Ser Gln Gln Arg Tyr Gln Pro Gln Gln Asp Met Ser Gln Glu  
 130 135 140  
 Gly Tyr Gly Thr Arg Ser Gln Pro Pro Leu Ala Pro Gly Lys Pro Asn  
 145 150 155 160  
 His Glu Asp Leu Asn Leu Ile Gln Gln Glu Arg Pro Ser Ser Leu Pro  
 165 170 175  
 Val Arg His Tyr Cys Ala Asp Leu Glu Met  
 180 185

&lt;210&gt; 5401

&lt;211&gt; 2674

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5401

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ggtttgaaga ggagagcaga ccaccagag tagtgggaga aagcaccggc agaaaagctg  
 480  
 gcatatccac cgagggcctc tctgttctt ttgacctttt tcagagtttc agagttatga  
 540  
 accaaatcgc cttcatgaga g  
 561

<210> 5398

<211> 154

<212> PRT

<213> Homo sapiens

<400> 5398

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Asp	Ala	Ile	His	Ser	Ala	Gly	Thr	Tyr	Ala	His	Asp	Gln	Leu	Ser	Gln
		20					25					30			
Thr	Ser	Ile	Pro	Ile	Ser	Pro	Pro	Leu	Thr	Pro	Gln	Asp	Ala	Asn	Glu
	35					40					45				
Ala	Gln	Gly	Trp	Ala	Glu	Ala	Gly	Arg	Ala	Val	His	Arg	Glu	Asp	Pro
	50				55				60						
Arg	Val	Ser	Leu	Gly	Leu	Pro	Arg	Trp	Leu	Cys	Pro	Pro	Phe	Cys	Leu
65				70				75					80		
Gly	Gly	Ser	Leu	Arg	Leu	Gly	Arg	Ala	Gln	Arg	Glu	Gly	Asp	Pro	Glu
			85			90					95				
Gly	Leu	Ala	Asp	Ser	Gly	Pro	Pro	Cys	Glu	Leu	Arg	Phe	Glu	Glu	Glu
		100				105					110				
Ser	Arg	Pro	Pro	Arg	Val	Val	Gly	Glu	Ser	Thr	Gly	Arg	Lys	Ala	Gly
	115					120					125				
Ile	Ser	Thr	Glu	Gly	Leu	Ser	Ala	Ser	Phe	Asp	Leu	Phe	Gln	Ser	Phe
	130				135						140				
Arg	Val	Met	Asn	Gln	Ile	Ala	Phe	Met	Arg						
145					150										

<210> 5399

<211> 835

<212> DNA

<213> Homo sapiens

<400> 5399

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 120  
 atgggagcagta accctcattc tcagcctcag cagagcagtc cgtaccaggg aggttccat  
 180  
 ggccctccag gccacagcg gtatccaatt ggcattccagg gtcggactcc cggggccatg  
 240  
 gccggaatgc agtacctca gcagcagatg ccacctcagt atggacagca aggtgtgagt  
 300  
 ggttactgcc agcagggcca acagccatat tacagccagc agccgcagcc cccgcacctc  
 360  
 ccacccaggg cgcagtatct gccgtcccag tcccagcaga ggtaccagcc gcagcaggac  
 420

Ala	Ser	Ser	Gln	Gln	Glu	Lys	Glu	Asp	Lys	Pro	Ala	Glu	Thr	Lys	Lys
			515				520					525			
Leu	Arg	Ile	Ala	Trp	Pro	Pro	Pro	Thr	Glu	Leu	Gly	Ser	Ser	Gly	Ser
			530				535				540				
Ala	Leu	Glu	Glu	Gly	Ile	Lys	Met	Ser	Lys	Pro	Lys	Trp	Pro	Pro	Glu
			545			550				555					560
Asp	Glu	Ile	Ser	Lys	Pro	Glu	Val	Pro	Glu	Asp	Val	Asp	Leu	Asp	Leu
				565					570				575		
Lys	Lys	Leu	Arg	Arg	Ser	Ser	Ser	Leu	Lys	Glu	Arg	Ser	Arg	Pro	Phe
			580					585					590		
Thr	Val	Ala	Ala	Ser	Phe	Gln	Ser	Thr	Ser	Val	Lys	Ser	Pro	Lys	Thr
			595					600					605		
Val	Ser	Pro	Pro	Ile	Arg	Lys	Gly	Trp	Ser	Met	Ser	Glu	Gln	Ser	Glu
			610			615					620				
Glu	Ser	Val	Gly	Gly	Arg	Val	Ala	Glu	Arg	Lys	Gln	Val	Glu	Asn	Ala
			625			630				635					640
Lys	Ala	Ser	Lys	Lys	Asn	Gly	Asn	Val	Gly	Lys	Thr	Thr	Trp	Gln	Asn
				645					650					655	
Lys	Glu	Ser	Lys	Gly	Glu	Thr	Gly	Lys	Arg	Ser	Lys	Glu	Gly	His	Ser
			660					665					670		
Leu	Glu	Met	Glu	Asn	Glu	Asn	Leu	Val	Glu	Asn	Gly	Ala	Asp	Ser	Asp
			675				680					685			
Glu	Asp	Asp	Asn	Ser	Phe	Leu	Lys	Gln	Gln	Ser	Pro	Gln	Glu	Pro	Lys
			690			695					700				
Ser	Leu	Asn	Trp	Ser	Ser	Phe	Val	Asp	Asn	Thr	Phe	Ala	Glu	Glu	Phe
			705			710				715					720
Thr	Thr	Gln	Asn	Gln	Lys	Ser	Gln	Asp	Val	Glu	Leu	Trp	Glu	Gly	Glu
				725				730						735	
Val	Val	Lys	Glu	Leu	Ser	Val	Glu	Glu	Gln	Ile	Lys	Arg	Asn	Arg	Tyr
			740					745					750		
Tyr	Asp	Glu	Asp	Glu	Asp	Glu	Glu								
			755				760								

&lt;210&gt; 5397

&lt;211&gt; 561

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5397

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120
ccccagaaca taagacagga gggagagatg ccatccattc agcgggcact tatgcccacg
180
accagctgag ccagaccagc attcccattt caccaccct tactcctcaa gatgcaaagt
240
aagctcaggg ctgggaggaa gctggcaggg ctgtccacag ggaggacccc cgtgtgtctc
300
tcgggctgcc caggtggctc tgtccaccct tctgtctggg aggctcctta aggctgggga
360
gggcccagag ggaaggagat cctgaggggc tggcagattc aggcctccc tgcgagctga
420

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65					70					75					80
Leu	Gly	Ala	Glu	Ser	His	Thr	Asp	Ser	Leu	Arg	Asn	Ser	Ser	Thr	Glu
				85					90					95	
Ile	Arg	His	Arg	Ala	Asp	His	Pro	Pro	Ala	Glu	Val	Thr	Ser	His	Ala
				100					105					110	
Ala	Ser	Gly	Ala	Lys	Ala	Asp	Gln	Glu	Glu	Gln	Ile	His	Pro	Arg	Ser
				115					120					125	
Arg	Leu	Arg	Ser	Pro	Pro	Glu	Ala	Leu	Val	Gln	Gly	Arg	Tyr	Pro	His
				130					135					140	
Ile	Lys	Asp	Gly	Glu	Asp	Leu	Lys	Asp	His	Ser	Thr	Glu	Ser	Lys	Lys
					150					155					160
Met	Glu	Asn	Cys	Leu	Gly	Glu	Ser	Arg	His	Glu	Val	Glu	Lys	Ser	Glu
				165						170					175
Ile	Ser	Glu	Asn	Thr	Asp	Ala	Ser	Gly	Lys	Ile	Glu	Lys	Tyr	Asn	Val
				180					185					190	
Pro	Leu	Asn	Arg	Leu	Lys	Met	Met	Phe	Glu	Lys	Gly	Glu	Pro	Thr	Gln
				195					200					205	
Thr	Lys	Ile	Leu	Arg	Ala	Gln	Ser	Arg	Ser	Ala	Ser	Gly	Arg	Lys	Ile
				210						220					
Ser	Glu	Asn	Ser	Tyr	Ser	Leu	Asp	Asp	Leu	Glu	Ile	Gly	Pro	Gly	Gln
				225						235					240
Leu	Ser	Ser	Ser	Thr	Phe	Asp	Ser	Glu	Lys	Asn	Glu	Ser	Arg	Arg	Asn
				245						250					255
Leu	Glu	Leu	Pro	Arg	Leu	Ser	Glu	Thr	Ser	Ile	Lys	Asp	Arg	Met	Ala
				260					265					270	
Lys	Tyr	Gln	Ala	Ala	Val	Ser	Lys	Gln	Ser	Ser	Ser	Thr	Asn	Tyr	Thr
				275					280					285	
Asn	Glu	Leu	Lys	Ala	Ser	Gly	Gly	Glu	Ile	Lys	Ile	His	Lys	Met	Glu
				290						300					
Gln	Lys	Glu	Asn	Val	Pro	Pro	Gly	Pro	Glu	Val	Cys	Ile	Thr	His	Gln
				305						315					320
Glu	Gly	Glu	Lys	Ile	Ser	Ala	Asn	Glu	Asn	Ser	Leu	Ala	Val	Arg	Ser
				325						330					335
Thr	Pro	Ala	Glu	Asp	Asp	Ser	Pro	Gly	Asp	Ser	Gln	Val	Lys	Ser	Glu
				340					345					350	
Val	Gln	Gln	Pro	Val	His	Pro	Lys	Pro	Leu	Ser	Pro	Asp	Ser	Arg	Ala
				355					360					365	
Ser	Ser	Leu	Ser	Glu	Ser	Ser	Pro	Pro	Lys	Ala	Met	Lys	Lys	Phe	Gln
				370					375					380	
Ala	Pro	Ala	Arg	Glu	Thr	Cys	Val	Glu	Cys	Gln	Lys	Thr	Val	Tyr	Pro
				385						395					400
Met	Glu	Arg	Leu	Leu	Ala	Asn	Gln	Gln	Val	Phe	His	Ile	Ser	Cys	Phe
				405						410					415
Arg	Cys	Ser	Tyr	Cys	Asn	Asn	Lys	Leu	Ser	Leu	Gly	Thr	Tyr	Ala	Ser
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Leu	His	Gly	Arg	Ile	Tyr	Cys	Lys	Pro	His	Phe	Asn	Gln	Leu	Phe	Lys
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&lt;210&gt; 5396

&lt;211&gt; 760

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5396

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&lt;210&gt; 5394

&lt;211&gt; 354

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5394

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&lt;400&gt; 5392

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&lt;210&gt; 5393

&lt;211&gt; 4837

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5393

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&lt;210&gt; 5391

&lt;211&gt; 797

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5391

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&lt;210&gt; 5392

&lt;211&gt; 55

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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 1711

&lt;210&gt; 5390

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5390

Met Ser Cys Val His Tyr Lys Phe Ser Ser Lys Leu Asn Tyr Asp Thr  
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<210> 5388

<211> 125

<212> PRT

<213> Homo sapiens

<400> 5388

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Gln	Met	Ala	Tyr	Thr	Ala	Thr	His	Gln	Ser	Met	Gly	Asn	Trp	Ser	Met
		20					25					30			
Phe	Thr	Trp	Cys	Phe	Cys	Phe	Ser	Met	Thr	Leu	Ile	Ile	Leu	Ile	Val
	35					40					45				
Glu	Leu	Cys	Gly	Leu	Gln	Ala	Arg	Phe	Pro	Leu	Ser	Trp	Arg	Asn	Phe
	50					55				60					
Pro	Ile	Thr	Phe	Ala	Cys	Tyr	Ala	Ala	Leu	Phe	Cys	Leu	Ser	Ala	Ser
65				70					75					80	
Ile	Ile	Tyr	Pro	Thr	Thr	Tyr	Val	Gln	Phe	Leu	Ser	His	Gly	Arg	Ser
			85					90					95		
Arg	Asp	His	Ala	Ile	Ala	Ala	Thr	Phe	Phe	Ser	Cys	Ile	Ala	Cys	Val
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Ala	Tyr	Ala	Thr	Glu	Met	Ala	Trp	Thr	Arg	Ala	Arg	Ala			
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<210> 5389

<211> 1711

<212> DNA

<213> Homo sapiens

<400> 5389

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<210> 5386  
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 Ser Val Pro Ser Pro Pro Arg Ala Gln Pro Leu Gly Arg Gly Leu His  
 35 40 45  
 Ala Gly Trp Leu Ala Arg Leu Gly Gln Pro Gly Leu Leu Gly Pro Tyr  
 50 55 60  
 Ala Ala Pro Thr Phe His Phe Leu Glu Met His Pro His Leu Gln Glu  
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<210> 5387  
 <211> 375  
 <212> DNA  
 <213> Homo sapiens

<400> 5387  
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Thr Asn Val Trp Ile	Asn Val His Asp Ile Phe Tyr Pro Phe Pro Gln	80
	85	90
Ser Glu Gly Glu Asp	Glu Leu Cys Phe Leu Arg Ala Asn Glu Cys Lys	95
	100	105
Thr Gly Phe Cys His	Leu Tyr Lys Val Thr Ala Val Leu Lys Ser Gln	110
	115	120
Gly Tyr Asp Trp Ser	Glu Pro Phe Ser Pro Gly Glu Gly Glu Gln Ser	125
	130	135
Leu Thr Asn Ala Ile	Trp Val Asn Glu Glu Thr Lys Leu Val Tyr Phe	140
145	150	155
Gln Gly Thr Lys Asp	Thr Pro Leu Glu His His Leu Tyr Val Val Ser	160
	165	170
Tyr Glu Ala Ala Gly	Glu Ile Val Arg Leu Thr Thr Pro Gly Phe Ser	175
	180	185
His Ser Cys Ser Met	Ser Gln Asn Phe Asp Met Phe Val Ser His Tyr	190
	195	200
Ser Ser Val Ser Thr	Pro Pro Cys Val His Val Tyr Lys Leu Ser Gly	205
	210	215
Pro Asp Asp Asp Pro	Leu His Lys Gln Pro Arg Phe Trp Ala Ser Met	220
225	230	235
Met Glu Ala Ala Lys	Ile Phe His Phe His Thr Arg Ser Asp Val Arg	240
	245	250
Leu Tyr Gly Met Ile	Tyr Lys Pro His Ala Leu Gln Pro Gly Lys Lys	255
	260	265
His Pro Thr Val Leu	Phe Val Tyr Gly Gly Pro Gln Val Gln Leu Val	270
	275	280
Asn Asn Ser Phe Lys	Gly Ile Lys Tyr Leu Arg Leu Asn Thr Leu Ala	285
	290	295
Ser Leu Gly Tyr Ala	Val Val Val Ile Asp Gly Arg Gly Ser Cys Gln	300
305	310	315
Arg Gly Leu Arg Phe	Glu Gly Ala Leu Lys Asn Gln Met Gly Gln Val	320
	325	330
Glu Ile Glu Asp Gln	Val Glu Gly Leu Gln Phe Val Ala Glu Lys Tyr	335
	340	345
Gly Phe Ile Asp Leu	Ser Arg Val Ala Ile His Gly Trp Ser Tyr Gly	350
	355	360
Gly Phe Leu Ser Leu	Met Gly Leu Ile His Lys Pro Gln Val Phe Lys	365
	370	375
Val Ala Ile Ala Gly	Ala Pro Val Thr Val Trp Met Ala Tyr Asp Thr	380
385	390	395
Gly Tyr Thr Glu Arg	Tyr Met Asp Val Pro Glu Asn Asn Gln His Gly	400
	405	410
Tyr Glu Ala Gly Ser	Val Ala Leu His Val Glu Lys Leu Pro Asn Glu	415
	420	425
Pro Asn Arg Leu Leu	Ile Leu His Gly Phe Leu Asp Glu Asn Val His	430
	435	440
Phe Phe His Thr Asn	Phe Leu Val Ser Gln Leu Ile Arg Ala Gly Lys	445
	450	455
Pro Tyr Gln Leu Gln	Val Ala Leu Pro Pro Val Ser Pro Gln Ile Tyr	460
465	470	475
Pro Asn Glu Arg His	Ser Ile Arg Cys Pro Glu Ser Gly Glu His Tyr	480

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 2027

&lt;210&gt; 5384

&lt;211&gt; 508

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5384

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 Phe Pro Lys Val Glu Tyr Ile Ala Arg Ala Gly Ala Trp Ala Met Phe  
 20 25 30  
 Leu Asp Arg Pro Gln Gln Trp Leu Gln Leu Val Leu Leu Pro Pro Ala  
 35 40 45  
 Leu Phe Ile Pro Ser Thr Glu Asn Glu Glu Gln Arg Leu Ala Ser Ala

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65      70      75      80
Gly Arg Met Asp Asp Val Ile Asn Ile Ser Gly His Arg Leu Gly Thr
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Ala Glu Ile Glu Asp Ala Ile Ala Asp His Pro Ala Val Pro Glu Ser
      100     105     110
Ala Val Ile Gly Tyr Pro His Asp Ile Lys Gly Glu Ala Ala Phe Ala
      115     120     125
Phe Ile Val Val Lys Asp Ser Ala Gly Asp Ser Asp Val Val Val Gln
      130     135     140
Glu Leu Lys Ser Met Val Ala Thr Lys Ile Ala Lys Tyr Ala Val Pro
      145     150     155     160
Asp Glu Ile Leu Val Lys Arg Leu Pro Lys Thr Arg Ser Gly Lys
      165     170     175
Val Met Arg Arg Leu Leu Arg Lys Ile Ile Thr Ser Glu Ala Gln Glu
      180     185     190
Leu Gly Asp Thr Thr Thr Leu Glu Asp Pro Ser Ile Ile Ala Glu Ile
      195     200     205
Leu Ser Val Tyr Gln Lys Cys Lys Asp Lys Gln Ala Ala Ala Lys
      210     215     220

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&lt;210&gt; 5383

&lt;211&gt; 2027

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5383

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&lt;210&gt; 5382

&lt;211&gt; 223

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5382

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Glu	Lys	Gly	Ser	Val	Val	Glu	Gly	Ser	Asn	Val	Ser	Gly	Ala	Leu	Cys
			20					25					30		
Ile	Ser	Gln	Ala	Trp	Pro	Gly	Met	Ala	Arg	Thr	Ile	Tyr	Gly	Asp	His
		35					40					45			
Gln	Arg	Phe	Val	Asp	Ala	Tyr	Phe	Lys	Ala	Tyr	Pro	Gly	Tyr	Tyr	Phe
	50					55					60				
Thr	Gly	Asp	Gly	Ala	Tyr	Arg	Thr	Glu	Gly	Gly	Tyr	Tyr	Gln	Ile	Thr

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 Pro Pro Ser Phe Gln Pro Ser Ser Pro Ala Pro Val Trp Arg Ser Ser  
 675 680 685  
 Leu Gly Pro Pro Ala Pro Leu Asp Arg Gly Glu Asn Leu Tyr Tyr Glu  
 690 695 700  
 Ile Gly Ala Ser Glu Gly Ser Pro Tyr Ser Gly Pro Thr Arg Ser Trp  
 705 710 715 720  
 Ser Pro Phe Arg Ser Met Pro Pro Asp Arg Leu Asn Ala Ser Tyr Gly  
 725 730 735  
 Met Leu Gly Gln Ser Pro Pro Leu His Arg Ser Pro Asp Phe Leu Leu  
 740 745 750  
 Ser Tyr Pro Pro Ala Pro Ser Cys Phe Pro Pro Asp His Leu Gly Tyr  
 755 760 765  
 Ser Ala Pro Gln His Pro Ala Arg Arg Pro Thr Pro Pro Glu Pro Leu  
 770 775 780  
 Tyr Val Asn Leu Ala Leu Gly Pro Arg Gly Pro Ser Pro Ala Ser Ser  
 785 790 795 800  
 Ser Ser Ser Ser Pro Pro Ala His Pro Arg Ser Arg Ser Asp Pro Gly  
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 Pro Pro Val Pro Arg Leu Pro Gln Lys Gln Arg Ala Pro Trp Gly Pro  
 820 825 830  
 Arg Thr Pro His Arg Val Pro Gly Pro Trp Gly Pro Pro Glu Pro Leu  
 835 840 845  
 Leu Leu Tyr Arg Ala Ala Pro Pro Ala Tyr Gly Arg Gly Gly Glu Leu  
 850 855 860  
 His Arg Gly Ser Leu Tyr Arg Asn Gly Gly Gln Arg Gly Glu Gly Ala  
 865 870 875 880  
 Gly Pro Pro Pro Pro Tyr Pro Thr Pro Ser Trp Ser Leu His Ser Glu  
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 Gly Gln Thr Arg Ser Tyr Cys  
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&lt;210&gt; 5381

&lt;211&gt; 1576

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5381

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                                  245                      250                      255  
 Leu Asp Pro Ala Gly Arg Cys Leu Leu Pro Arg Pro Lys Ser Leu Ala  
                                  260                      265                      270  
 Gly Ser Cys Pro Ser Thr Arg Leu Leu Thr Leu Glu Glu Ala Gln Ala  
                                  275                      280                      285  
 Arg Thr Gln Gly Arg Leu Gly Thr Pro Thr Glu Pro Thr Thr Pro Lys  
                                  290                      295                      300  
 Ala Pro Ala Ser Pro Ala Glu Arg Arg Lys Gly Glu Arg Gly Glu Lys  
 305                                   310                      315                      320  
 Gln Arg Lys Pro Gly Gly Ser Ser Trp Lys Thr Phe Phe Ala Leu Gly  
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 Arg Gly Pro Ser Val Pro Arg Lys Lys Pro Leu Pro Trp Leu Gly Gly  
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 Thr Arg Ala Pro Pro Gln Pro Ser Ala Trp Leu Asp Asp Gly Asp Glu  
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 Leu Asp Phe Ser Pro Pro Arg Cys Leu Glu Gly Leu Arg Gly Leu Asp  
                                  370                      375                      380  
 Phe Asp Pro Leu Thr Phe Arg Cys Ser Ser Pro Thr Pro Gly Asp Pro  
 385                                   390                      395                      400  
 Ala Pro Pro Ala Ser Pro Ala Pro Pro Ala Pro Ala Ser Ala Phe Pro  
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 Pro Arg Val Thr Pro Gln Ala Ile Ser Pro Arg Gly Pro Thr Ser Pro  
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 Pro Pro Ala Val Leu Glu Leu Leu Gly Ala Gly Gly Ala Pro Ala Ser  
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 Ala Thr Pro Thr Pro Ala Leu Ser Pro Gly Arg Ser Leu Arg Pro His  
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 Leu Ile Pro Leu Leu Arg Gly Ala Glu Ala Pro Leu Thr Asp Ala  
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                                  500                      505                      510  
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                                  565                      570                      575  
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                                  580                      585                      590  
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 625                                   630                      635                      640  
 Ser Gln Val Pro Thr Pro Gly Phe Phe Ser Pro Ala Pro Arg Glu Cys  
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&lt;210&gt; 5380

&lt;211&gt; 903

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5380

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Gln	Leu	Cys	His	Gly	Leu	Val	Gly	Ser	Trp	Pro	Ala	Cys	Ser	Ala	Pro
		20						25					30		
Ser	Cys	Ala	Pro	Ala	Leu	Leu	Gly	Ser	Gly	Cys	Gly	Ser	Gly	Glu	Ser
		35					40					45			
Cys	Asp	Arg	Gly	Cys	Leu	Ala	Ala	Ile	Leu	Ala	Ser	Thr	Ser	Ala	Thr
	50					55					60				
Gln	Ala	Arg	Met	Val	Leu	Arg	Cys	Cys	Ser	Glu	Phe	Ile	Glu	Ala	His
	65				70					75				80	
Gly	Val	Val	Asp	Gly	Ile	Tyr	Arg	Leu	Ser	Gly	Val	Ser	Ser	Asn	Ile
			85					90						95	
Gln	Arg	Leu	Arg	His	Glu	Phe	Asp	Ser	Glu	Arg	Ile	Pro	Glu	Leu	Ser
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&lt;211&gt; 1452

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5377

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5375

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&lt;210&gt; 5376

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&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5376

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1860  
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1920  
aaagcaatat ttgctgtgct cacaagcgtc ttgacaaaagg atgactggtg gaatcttctg  
1980  
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2100  
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2160  
aggataatgg taatggaaaa tgtcaataaa ccccgactct ggaacatttt caatcaagtt  
2220  
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2340  
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2400  
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2460  
catgctctta ttgtacaggg cttttccttt cttaatcgat acctcagttt acgtgggccc  
2520

225                      230                      235                      240  
 Tyr Arg Arg Asp Val His Gln Val Ala Cys Tyr Ser Cys Thr Ser Gly  
                                  245                      250                      255  
 Gln Trp Ser Ser Val Cys Pro Leu Pro Ala Gly His Gly Glu Pro Gly  
                                  260                      265                      270  
 Ile Ala Val Leu Asp Asn Arg Ile Tyr Val Leu Gly Gly Arg Ser His  
                                  275                      280                      285  
 Asn Arg Gly Ser Arg Thr Gly Tyr Val His Ile Tyr Asp Val Glu Lys  
                                  290                      295                      300  
 Asp Cys Trp Glu Glu Gly Pro Gln Leu Asp Asn Ser Ile Ser Gly Leu  
 305                                   310                      315                      320  
 Ala Ala Cys Val Leu Thr Leu Pro Arg Ser Leu Leu Leu Glu Pro Pro  
                                  325                      330                      335  
 Arg Gly Thr Pro Asp Arg Ser Gln Ala Asp Pro Asp Phe Ala Ser Glu  
                                  340                      345                      350  
 Val Met Ser Val Ser Asp Trp Glu Glu Phe Asp Asn Ser Ser Glu Asp  
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&lt;210&gt; 5373

&lt;211&gt; 4221

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5373

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 60  
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 120  
 gactacttgg aagggaaaat ctccctttgag gagttcgaac ggcggagaga agagagaaaa  
 180  
 acccgcgaga agaaaagtct tcaggaaaaa ggcaagttat cagctgaaga aaatcccgat  
 240  
 gactctgaag ttccatcatc atcaggaatt aactctacca aatcccaaga caaagatgtc  
 300  
 aatgaaggag aaacatcaga tggagtggag aagtcagttc acaaggtctt tgcttccatg  
 360  
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 420  
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 480  
 cgtgaaacca agaaaatgat gaaagagaaa aggcctcgga gtaaacttcc cagagctctg  
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 720  
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 780  
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 900

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 720  
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 960  
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 1080  
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 1177

<210> 5372

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5372

Xaa	His	Ser	Ala	Ser	Ala	Leu	Met	Tyr	His	Arg	Asn	Glu	Ser	Leu	Gln
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Pro	Ser	Leu	Gln	Ser	Pro	Gln	Thr	Glu	Leu	Arg	Ser	Asp	Phe	Gln	Cys
		20						25					30		
Val	Val	Gly	Phe	Gly	Gly	Ile	His	Ser	Thr	Pro	Ser	Thr	Val	Leu	Ser
		35				40					45				
Asp	Gln	Ala	Lys	Tyr	Leu	Asn	Pro	Leu	Leu	Gly	Glu	Trp	Lys	His	Phe
	50					55					60				
Thr	Ala	Ser	Leu	Ala	Pro	Arg	Met	Ser	Asn	Gln	Gly	Ile	Ala	Val	Leu
	65				70					75				80	
Asn	Asn	Phe	Val	Tyr	Leu	Ile	Gly	Gly	Asp	Asn	Asn	Val	Gln	Gly	Phe
		85						90					95		
Arg	Ala	Glu	Ser	Arg	Cys	Trp	Arg	Tyr	Asp	Pro	Arg	His	Asn	Arg	Trp
		100						105				110			
Xaa	Pro	Asp	Pro	Val	Pro	Ala	Ala	Gly	Ala	Arg	Arg	Pro	Val	Xaa	Val
	115					120						125			
Cys	Val	Val	Gly	Arg	Tyr	Ile	Tyr	Ala	Val	Ala	Gly	Arg	Asp	Tyr	His
	130					135					140				
Asn	Asp	Leu	Asn	Ala	Val	Glu	Arg	Tyr	Asp	Pro	Ala	Thr	Asn	Ser	Trp
	145			150					155					160	
Ala	Tyr	Val	Ala	Pro	Leu	Lys	Arg	Glu	Val	Tyr	Ala	His	Ala	Gly	Ala
		165						170					175		
Thr	Leu	Glu	Gly	Lys	Met	Tyr	Ile	Thr	Cys	Gly	Arg	Arg	Gly	Glu	Asp
		180						185					190		
Tyr	Leu	Lys	Glu	Thr	His	Cys	Tyr	Asp	Pro	Gly	Ser	Asn	Thr	Trp	His
	195					200						205			
Thr	Leu	Ala	Asp	Gly	Pro	Val	Arg	Arg	Ala	Trp	His	Gly	Met	Ala	Thr
	210					215						220			
Leu	Leu	Asn	Lys	Leu	Tyr	Val	Ile	Gly	Gly	Ser	Asn	Asn	Asp	Ala	Gly

<211> 148  
 <212> PRT  
 <213> Homo sapiens

<400> 5370  
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 His Leu Asp Glu Lys Asp Leu Lys Pro Leu Phe Glu Gln Phe Gly Arg  
 20 25 30  
 Ile Tyr Glu Leu Thr Val Leu Lys Asp Pro Tyr Thr Gly Met His Lys  
 35 40 45  
 Gly Gly Arg Pro Ala Pro Ser Pro Leu Ser Pro Ser Leu Arg Leu Pro  
 50 55 60  
 Pro His Leu Pro Ala Ser Ser Leu Pro His His His Pro Ser Ser Ala  
 65 70 75 80  
 His Leu Pro Pro Leu Pro Ala Ser Ala Gly Ala Ser Val Leu Thr Pro  
 85 90 95  
 Ser Leu Pro Pro Thr Pro Pro Pro Leu Ser Gly Gly Ala Ala Asp Arg  
 100 105 110  
 Ser Glu Arg Ala Pro Ser Pro Pro Pro Pro Leu Pro Pro Ser Pro  
 115 120 125  
 Pro Ser Gly Ile Ser Ser Leu Ser Pro Ser Leu Ser Pro Ser Leu Ser  
 130 135 140  
 Pro Phe Leu Phe  
 145

<210> 5371  
 <211> 1177  
 <212> DNA  
 <213> Homo sapiens

<400> 5371  
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 120  
 tccacgccgt ccactgtcct cagcgaccag gccaaagtatc taaacccctt actgggagag  
 180  
 tggaagcact tcaactgcct cctggccccc cgcattgtcca accagggcat cgcggtgctc  
 240  
 aacaacttcg tatacttgat tggaggggac aacaatgtcc aaggatttcg agcagagtc  
 300  
 cgatgctgga ggtatgaccc acggcacaac cgctggnttc cagatccagt ccctgcagca  
 360  
 ggagcacgcc gacctgtcnn cgtgtgtgtt gtaggcaggt acatctacgc tgtggcgggc  
 420  
 cgtgactacc acaatgacct gaatgctgtg gagcgctacg accctgccac caactcctgg  
 480  
 gcatacgtgg cccactcaa gagggaggtg tatgccacg caggcgcgac gctggagggg  
 540  
 aagatgtata tcacctgcgg ccgcagaggg gaggattacc tgaaagagac aactgctac  
 600  
 gatccaggca gcaacacttg gcacacactg gctgatgggc ctgtgcggcg cgctggcac  
 660

<211> 137  
 <212> PRT  
 <213> Homo sapiens

<400> 5368  
 Met Leu Pro Pro Lys Pro Pro Thr Phe Gly Glu Phe Leu Ser Gln His  
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 Lys Ala Glu Ala Ser Ser Arg Arg Arg Arg Lys Ser Ser Arg Pro Gln  
 20 25 30  
 Ala Lys Ala Ala Pro Arg Ala Tyr Ser Asp His Asp Asp Arg Trp Glu  
 35 40 45  
 Thr Lys Glu Gly Ala Ala Ser Pro Ala Pro Glu Thr Pro Gln Pro Thr  
 50 55 60  
 Ser Pro Glu Thr Ser Pro Lys Glu Thr Pro Met Gln Pro Pro Glu Ile  
 65 70 75 80  
 Pro Ala Pro Ala His Arg Pro Pro Glu Asp Glu Gly Glu Glu Asn Glu  
 85 90 95  
 Gly Glu Glu Asp Glu Glu Trp Glu Asp Ile Ser Glu Asp Glu Glu Glu  
 100 105 110  
 Glu Glu Ile Glu Val Glu Glu Gly Asp Glu Glu Glu Pro Ala Gln Asp  
 115 120 125  
 His Gln Ala Pro Glu Ala Ala Pro Thr  
 130 135

<210> 5369  
 <211> 646  
 <212> DNA  
 <213> Homo sapiens

<400> 5369  
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 120  
 cagcagcagc agctcctgca gccgcggccc tcgcccgtgg gcagcagcgg gcccgagccc  
 180  
 cccggggggc agcccgacgg catgaaggac ctggacgcca tcaaactctt cgtggggccag  
 240  
 atccccgcgc acctggacga gaaggacctc aagccgctct tcgagcagtt cggccgcctc  
 300  
 tacgagctca cggtgctcaa agacccttac acgggggatgc acaaaggtgg gcgccccggc  
 360  
 cctccccccc tctccccctc cctccgctc ccacccacc ttccggcctc ttctctcccc  
 420  
 catcaccatc cctcctctgc tcacctcct cctctgctg cctctgccgg agcatcggtt  
 480  
 cttacccctt cctccccacc caccctcct cccctctctg ggggtgcagc tgacagatcc  
 540  
 gaggcggccc cctccccctc tcgcgccct ctcctcctt cccaccttc cggcatctcc  
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 646

<210> 5370

275                      280                      285  
 Val Leu Arg Gly Phe Leu Glu Asp Val Val Pro Asp Ala Thr Ser Ala  
 290                      295                      300  
 Tyr Pro Tyr Leu Leu Leu Tyr Glu Ser Arg Gln Arg Arg Tyr Leu Gly  
 305                      310                      315                      320  
 Ser Ser Pro Glu Gly Ser Gly Phe Cys Ser Lys Asp Arg Phe Val Ala  
 325                      330                      335  
 Tyr Pro Cys Ala Val Gly Gln Thr Ala Phe Ser Ser Gly Arg His Tyr  
 340                      345                      350  
 Trp Glu Val Gly Met Asn Ile Thr Gly Asp Ala Leu Trp Ala Leu Gly  
 355                      360                      365  
 Val Cys Arg Asp Asn Val Ser Arg Lys Asp Arg Val Leu Lys Cys Pro  
 370                      375                      380  
 Glu Asn Gly Phe Trp Val Val Gln Leu Ser Lys Gly Thr Lys Tyr Leu  
 385                      390                      395                      400  
 Ser Thr Phe Ser Ala Leu Thr Pro Val Met Leu Met Glu Pro Pro Ser  
 405                      410                      415  
 His Met Gly Ile Phe Leu Asp Phe Glu Ala Gly Glu Val Ser Phe Tyr  
 420                      425                      430  
 Ser Val Ser Asp Gly Ser His Leu His Thr Tyr Ser Gln Ala Thr Phe  
 435                      440                      445  
 Pro Gly Pro Leu Gln Pro Phe Phe Cys Leu Gly Ala Pro Lys Ser Gly  
 450                      455                      460  
 Gln Met Val Ile Ser Thr Val Thr Met Trp Val Lys Gly  
 465                      470                      475

&lt;210&gt; 5367

&lt;211&gt; 549

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5367

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 120  
 gagtctcagg ggctggggat gctgcccccg aagcccccta cttttgggga gttcctgtcc  
 180  
 cagcaciaaag ctgaggccag cagccgcaga aggagaaaga gcagtcggcc ccaggccaag  
 240  
 gcagcgccca gggcctacag tgaccatgat gaccgctggg agacaaaaga aggggcagca  
 300  
 tccccagccc ctgagactcc acagcctact tccccgaga cttcccccaa ggagacaccc  
 360  
 atgcagccac ccgagatccc agctcctgcc caccggcctc ctgaagacga gggggaagag  
 420  
 aatgaggggg aagaggatga agaatgggag gacataagtg aggatgagga agaggaggag  
 480  
 atcgaggtgg aagaaggtga tgaggaggaa ccagcccaag accaccaagc cccagaggct  
 540  
 gccccacc  
 549

&lt;210&gt; 5368

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 1560  
 gggcactgct cctggctctg cagaagggtg gggccttctg cttactgcag gccacctgcc  
 1620  
 agggttctct ggcacacgc tggcagccat tagacacaca ggggggttcc tcaaattcta  
 1680  
 aatataattg tgattagaac tgtcaaacat taagagggtta tactgacaga tgcttcttag  
 1740  
 aggaaacttt tgaaagcccc tgcgttctga gtggaccgat ttctaaatcc atacctacac  
 1800  
 accaaaaaaa aaaaaaagtc gagc  
 1824

&lt;210&gt; 5366

&lt;211&gt; 477

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5366

Met	Glu	Ala	Val	Glu	Leu	Ala	Arg	Lys	Leu	Gln	Glu	Glu	Ala	Thr	Cys
1				5					10					15	
Ser	Ile	Cys	Leu	Asp	Tyr	Phe	Thr	Asp	Pro	Val	Met	Thr	Thr	Cys	Gly
		20						25					30		
His	Asn	Phe	Cys	Arg	Ala	Cys	Ile	Gln	Leu	Ser	Trp	Glu	Lys	Ala	Arg
		35					40					45			
Gly	Lys	Lys	Gly	Arg	Arg	Lys	Arg	Lys	Gly	Ser	Phe	Pro	Cys	Pro	Glu
	50					55					60				
Cys	Arg	Glu	Met	Ser	Pro	Gln	Arg	Asn	Leu	Leu	Pro	Asn	Arg	Leu	Leu
65					70					75				80	
Thr	Lys	Val	Ala	Glu	Met	Ala	Gln	Gln	His	Pro	Gly	Leu	Gln	Lys	Gln
			85						90					95	
Asp	Leu	Cys	Gln	Glu	His	His	Glu	Pro	Leu	Lys	Leu	Phe	Cys	Gln	Lys
		100						105					110		
Asp	Gln	Ser	Pro	Ile	Cys	Val	Val	Cys	Arg	Glu	Ser	Arg	Glu	His	Arg
		115					120					125			
Leu	His	Arg	Val	Leu	Pro	Ala	Glu	Glu	Ala	Val	Gln	Gly	Tyr	Lys	Leu
	130					135					140				
Lys	Leu	Glu	Glu	Asp	Met	Glu	Tyr	Leu	Arg	Glu	Gln	Ile	Thr	Arg	Thr
145					150					155				160	
Gly	Asn	Leu	Gln	Ala	Arg	Glu	Glu	Gln	Ser	Leu	Ala	Glu	Trp	Gln	Gly
			165					170						175	
Lys	Val	Lys	Glu	Arg	Arg	Glu	Arg	Ile	Val	Leu	Glu	Phe	Glu	Lys	Met
		180						185				190			
Asn	Leu	Tyr	Leu	Val	Glu	Glu	Glu	Gln	Arg	Leu	Leu	Gln	Ala	Leu	Glu
	195						200					205			
Thr	Glu	Glu	Glu	Glu	Thr	Ala	Ser	Arg	Leu	Arg	Glu	Ser	Val	Ala	Cys
	210					215					220				
Leu	Asp	Arg	Gln	Gly	His	Ser	Leu	Glu	Leu	Leu	Leu	Gln	Leu	Glu	
225					230					235				240	
Glu	Arg	Ser	Thr	Gln	Gly	Pro	Leu	Gln	Met	Leu	Gln	Asp	Met	Lys	Glu
			245						250					255	
Pro	Leu	Ser	Arg	Lys	Asn	Asn	Val	Ser	Val	Gln	Cys	Pro	Glu	Val	Ala
		260						265					270		
Pro	Pro	Thr	Arg	Pro	Arg	Thr	Val	Cys	Arg	Val	Pro	Gly	Gln	Ile	Glu

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5365

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120  
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180  
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240  
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300  
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360  
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480  
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540  
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720  
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780  
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900  
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960  
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1020  
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 540  
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 720  
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 780  
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 840  
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 894

&lt;210&gt; 5364

&lt;211&gt; 187

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5364

Ala	Ala	Leu	Pro	Ser	Arg	Cys	Pro	Leu	Gln	Pro	Arg	Gln	Pro	Trp	Arg
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Arg	Trp	Arg	Lys	Arg	Ala	Leu	Gly	Arg	Leu	Gln	Gly	Xaa	Gly	Pro	Gln
			20					25					30		
Pro	Gly	Leu	Tyr	Ser	Tyr	Ile	Arg	Asp	Asp	Leu	Phe	Thr	Ser	Glu	Ile
		35				40						45			
Phe	Lys	Leu	Glu	Leu	Gln	Asn	Ala	Pro	Arg	His	Ala	Ser	Phe	Ser	Asp
	50				55					60					
Val	Arg	Arg	Phe	Leu	Gly	Arg	Phe	Gly	Leu	Gln	Pro	His	Lys	Thr	Lys
65				70					75						80
Leu	Phe	Gly	Gln	Pro	Pro	Cys	Ala	Phe	Val	Thr	Phe	Arg	Ser	Ala	Ala
			85						90					95	
Glu	Arg	Asp	Lys	Ala	Leu	Arg	Val	Leu	His	Gly	Ala	Leu	Trp	Lys	Gly
			100					105					110		
Arg	Pro	Leu	Ser	Val	Ala	Trp	Pro	Gly	Pro	Arg	Pro	Thr	Pro	Trp	Pro
		115					120					125			
Gly	Gly	Gly	Xaa	Gln	Glu	Gly	Glu	Ser	Glu	Pro	Pro	Val	Thr	Arg	Xaa
		130				135						140			
Gly	Arg	Arg	Gly	Asp	Pro	Ser	Met	Asp	Ser	Ala	Leu	Xaa	Leu	Ser	Ser
145				150					155						160
Leu	Ser	Gly	Ser	Ser	Trp	Ser	Ala	Ser	Arg	Cys	Cys	Arg	Asn	Xaa	Ala
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&lt;211&gt; 1824

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<212> PRT

<213> Homo sapiens

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&lt;213&gt; Homo sapiens

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His Pro Asn Leu Asp Lys Leu Gly Tyr Ser Gln Lys Met Arg Phe Thr
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&lt;210&gt; 5359

&lt;211&gt; 5003

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5359

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&lt;210&gt; 5358

&lt;211&gt; 321

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5358

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&lt;400&gt; 5356

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&lt;210&gt; 5357

&lt;211&gt; 1722

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5357

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&lt;210&gt; 5356

&lt;211&gt; 245

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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 340 345 350  
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 355 360 365  
 Phe Trp Gln Thr Glu Thr Gly Gly His Met Leu Thr Pro Leu Pro Val  
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 Pro Thr Pro Met Lys Pro Gly Ser Ala Thr Phe Pro Phe Phe Gly Val  
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 Glu Gly Tyr Leu Val Phe Lys Gln Pro Trp Pro Gly Ile Met Arg Thr  
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 Val Tyr Gly Asn His Glu Arg Phe Glu Thr Thr Tyr Ser Lys Lys Phe  
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 450 455 460  
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 His Leu Leu Ser Thr Ala Glu Val Glu Ser Ala Leu Val Glu His Glu  
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&lt;210&gt; 5355

&lt;211&gt; 1596

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5355

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<213> Homo sapiens

<400> 5354

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Val	Asn	Leu	Lys	Glu	Leu	Ala	Asp	Glu	Ala	Leu	Gln	Lys	Cys	Gln	Glu
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 Gly His Glu Gly Leu Gly Arg Leu Leu Trp Gln Ser Gly Pro Leu Gln  
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 <212> DNA  
 <213> Homo sapiens

<400> 5351  
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Asp Ile Asn Ile Phe Asp Glu Ile Asn Leu Met Ser Leu Ala Thr Glu
      385      390      395      400
Asp Asn Phe Asp Pro Ile Asp Val Ser Gln Leu Phe Asp Glu Ser Asp
      405      410      415
Ser Asp Ser Gly Leu Ser Leu Asp Ser Ser His Asn Asn Thr Ser Val
      420      425      430
Ile Lys Ser Asn Ser Ser His Ser Val Cys Asp Glu Gly Ala Ile Gly
      435      440      445
Tyr Cys Thr Asp His Glu Ser Ser Ser His His Asp Leu Glu Gly Ala
      450      455      460
Val Gly Gly Tyr Tyr Pro Glu Pro Ser Lys Leu Cys His Leu Asp Gln
      465      470      475      480
Ser Asp Ser Asp Phe His Gly Asp Leu Thr Phe Gln His Val Phe His
      485      490      495
Asn His Thr Tyr His Leu Gln Pro Thr Ala Pro Glu Ser Thr Ser Glu
      500      505      510
Pro Phe Pro Trp Pro Gly Lys Ser Gln Lys Ile Arg Ser Arg Tyr Leu
      515      520      525
Glu Asp Thr Asp Arg Asn Leu Ser Arg Asp Glu Gln Arg Ala Lys Ala
      530      535      540
Leu His Ile Pro Phe Ser Val Asp Glu Ile Val Gly Met Pro Val Asp
      545      550      555      560
Ser Phe Asn Ser Met Leu Ser Arg Tyr Tyr Leu Thr Asp Leu Gln Val
      565      570      575Leu Ile Arg
Asp Ile Arg Arg Arg Gly Lys Asn Lys Val Ala Ala
      580      585      590
Gln Asn Cys Arg Lys Arg Lys Leu Asp Ile Ile Leu Asn Leu Glu Asp
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Asp Val Cys Asn Leu Gln Ala Lys Lys Glu Thr Leu Lys Arg Glu Gln
      610      615      620
Ala Gln Cys Asn Lys Ala Ile Asn Ile Met Lys Gln Lys Leu His Asp
      625      630      635      640
Leu Tyr His Asp Ile Phe Ser Arg Leu Arg Asp Asp Gln Gly Arg Pro
      645      650      655
Val Asn Pro Asn His Tyr Ala Leu Gln Cys Thr His Asp Gly Ser Ile
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Leu Ile Val Pro Lys Glu Leu Val Ala Ser Gly His Lys Lys Glu Thr
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Gln Lys Gly Lys Arg Lys
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&lt;210&gt; 5349

&lt;211&gt; 425

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5349

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<210> 5348

<211> 694

<212> PRT

<213> Homo sapiens

<400> 5348

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		20						25					30		
Tyr	Leu	Leu	Leu	Pro	Pro	Pro	Thr	Leu	Leu	Gln	Asp	Glu	Leu	Leu	Phe
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Leu	Gly	Gly	Pro	Ala	Ser	Ser	Ala	Tyr	Ala	Leu	Ser	Pro	Phe	Ser	Ala
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Ser	Gly	Gly	Trp	Gly	Arg	Ala	Gly	His	Leu	His	Pro	Lys	Gly	Arg	Glu
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Leu	Asp	Pro	Ala	Ala	Pro	Pro	Glu	Gly	Gln	Leu	Leu	Arg	Glu	Val	Arg
				85					90					95	
Ala	Leu	Gly	Val	Pro	Phe	Val	Pro	Arg	Thr	Ser	Val	Asp	Ala	Trp	Leu
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Val	His	Ser	Val	Ala	Ala	Gly	Ser	Ala	Asp	Glu	Ala	His	Gly	Leu	Leu
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Arg	Ser	Gly	Pro	Leu	Asp	Ala	Gly	Glu	Glu	Glu	Lys	Ala	Pro	Ala	Glu
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Pro	Thr	Ala	Gln	Val	Pro	Asp	Ala	Gly	Gly	Cys	Ala	Ser	Glu	Glu	Asn
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Ala	Glu	Lys	Thr	Thr	Glu	Ser	Arg	Asn	Glu	Arg	His	Leu	Asn	Gly	Thr
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Asp	Thr	Ser	Phe	Ser	Leu	Glu	Asp	Leu	Phe	Gln	Leu	Leu	Ser	Ser	Gln
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<213> Homo sapiens

<400> 5347

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4521

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&lt;210&gt; 5346

&lt;211&gt; 534

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5346

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 Glu Arg Ser Phe Phe Leu Lys Lys Arg Arg Ala Asp Phe Val Ala Gly  
 35 40 45  
 Ser Leu Ser Gly Arg Val Ile Val Ala Gly Gly Leu Gly Asn Gln Pro  
 50 55 60  
 Thr Val Leu Glu Thr Ala Glu Ala Phe His Pro Gly Lys Asn Lys Trp  
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 Glu Ile Leu Pro Ala Met Pro Thr Pro Arg Cys Ala Cys Ser Ser Ile  
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                     580                      585                      590  
 Lys Val Gly Met Ala Ala Val Gln Leu Ala Pro Gly Gln Thr Phe Asp  
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 Gly Glu Lys Leu Tyr Gln His Val Arg Ala Trp Leu Pro Ala Tyr Ala  
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 Thr Pro His Phe Ile Arg Ile Gln Asp Ala Met Glu Val Thr Ser Thr  
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 Phe Lys Leu Met Lys Thr Arg Leu Val Arg Glu Gly Phe Asn Val Gly  
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 Ile Val Val Asp Pro Leu Phe Val Leu Asp Asn Arg Ala Gln Ser Phe  
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&lt;210&gt; 5343

&lt;211&gt; 752

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5343

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Phe Gly Glu Leu Asp Ala Arg Ala Cys Gln Ala Ala Trp Ala Leu Lys
145      150      155      160
Ala Glu Leu Gly Asp Pro Ala Ser Leu Cys Ala Gly Glu Pro Thr Ala
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Leu Leu Val Leu Ala Ser Gln Ala Val Pro Ala Leu Cys Met Trp Leu
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Gly Leu Ala Lys Leu Gly Cys Pro Thr Ala Trp Ile Asn Pro His Gly
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225      230      235      240
Lys Leu Gln Ala Glu Asn Ile Arg Cys Phe Tyr Leu Ser His Thr Ser
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Ser His Pro Val Pro Ala Asp Leu Arg Ala Gly Ile Thr Trp Arg Ser
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Tyr His Val Met Gly Leu Val Val Gly Ile Leu Gly Cys Leu Asp Leu
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Leu Leu Arg Tyr Leu Cys Asn Ile Pro Gln Gln Pro Glu Asp Arg Thr
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450      455      460
Glu Leu Val Gln Phe Asp Met Glu Ala Ala Glu Pro Val Arg Asp Asn
465      470      475      480
Gln Gly Phe Cys Ile Pro Val Gly Leu Gly Glu Pro Gly Leu Leu Leu
      485      490      495
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<210> 5342

<211> 690

<212> PRT

<213> Homo sapiens

<400> 5342

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 Ser Leu Ala Ala Ala Ala Leu Ala Leu Thr Leu Leu Pro Ala Arg Leu  
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&lt;210&gt; 5341

&lt;211&gt; 2455

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5341

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<211> 217

<212> PRT

<213> Homo sapiens

<400> 5340

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Cys	Leu	Cys	Trp	Gln	His	Ser	Val	Cys	Met	Gly	Leu	Leu	Glu	Glu	Ser
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<210> 5338

<211> 139

<212> PRT

<213> Homo sapiens

<400> 5338

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			85						90					95	
Lys	Phe	Ser	Glu	Pro	Pro	Ser	Pro	Ser	Val	Leu	Pro	Lys	Pro	Pro	Ser
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His	Trp	Val	Pro	Val	Ser	Phe	Asn	Pro	Ser	Asp	Lys	Glu	Ile	Met	Thr
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<210> 5339

<211> 847

<212> DNA

<213> Homo sapiens

<400> 5339

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Glu Glu Val Glu Glu Arg Met Trp Ala Ala Ile Gln Ser Trp Asp Ile		655
	660	665
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&lt;210&gt; 5337

&lt;211&gt; 2742

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5337

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			260		265
Leu	Phe	Val	Gln	Lys	Leu
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His	Met	Ile	Leu	Glu	Asn
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Gly	Gln	Thr	Ser	Ile	Glu
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Ala	Leu	Lys	Arg	Pro	Leu
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Cys	Arg	Leu	Thr	His	Ile
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Glu	Glu	Gln	Val	Leu	Asn
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Glu	Ile	Thr	Ser	Arg	Ala
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<212> PRT

<213> Homo sapiens

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			35				40					45			
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Leu	Glu	Ala	Ile	Arg	Lys	Gln	Asp	Leu	Val	Glu	Leu	Tyr	Leu	Thr	Asn
			100					105					110		
Cys	Glu	Lys	Leu	Ser	Ala	Lys	Ser	Leu	Gln	Thr	Leu	Arg	Ser	Phe	Ser
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His	Thr	Leu	Val	Ser	Leu	Ser	Leu	Phe	Gly	Cys	Thr	Asn	Ile	Phe	Tyr
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&lt;400&gt; 5334

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 Glu Ile Arg Gly Ser Arg Ala Arg Ala Leu Pro Asp Arg Ala Leu Val  
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 Asn Cys Gln Tyr Ser Ser Ala Thr Phe Ser Thr Gly Glu Arg Lys Arg  
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 Arg Pro His Gly Asp Arg Lys Ser Cys Glu Met Gly Leu Gln Leu Arg  
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 Gln Thr Phe Glu Ala Ala Ile Leu Thr Gln Leu His Pro Arg Ser Gln  
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 Leu Ala Leu Ala Leu Leu Pro Ala Ser Gly Gln Ile Ala Leu Leu Glu  
 210 215 220  
 Met Asp Ala Arg Leu His Glu Asp His Leu Glu Arg Val Leu Glu Ala  
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&lt;210&gt; 5335

&lt;211&gt; 4282

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5335

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<213> Homo sapiens

<400> 5332

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Lys Gln Lys Arg Ala Asn His Arg Glu Arg Asn Lys Thr Arg Gly Lys
 20           25           30
Met Ile Thr Asp Ser Gly Lys Phe Ser Gly Ser Ser Pro Ala Pro Pro
 35           40           45
Ser Gln Pro Gln Gly Leu Ser Tyr Ala Xaa Gly Arg Gly
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<211> 883

<212> DNA

<213> Homo sapiens

<400> 5333

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<210> 5334

<211> 269

<212> PRT

<213> Homo sapiens

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&lt;211&gt; 1069

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5331

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&lt;210&gt; 5332

&lt;211&gt; 61

&lt;212&gt; PRT

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<210> 5330

<211> 308

<212> PRT

<213> Homo sapiens

<400> 5330

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Ala	Leu	Arg	Lys	Lys	Glu	Leu	Asp	Glu	Glu	Glu	Ser	Ile	Arg	Lys	Lys
		35					40					45			
Ala	Val	Gln	Phe	Gly	Thr	Gly	Glu	Leu	Cys	Asp	Ala	Ile	Ser	Ala	Val
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Glu	Glu	Lys	Val	Ser	Tyr	Leu	Arg	Pro	Leu	Asp	Phe	Glu	Glu	Ala	Arg
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His	Ser	Ala	Leu	Phe	Lys	Val	Leu	Ala	Phe	Phe	Glu	Thr	Asp	Met	Glu
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Arg	Arg	Cys	Lys	Met	His	Lys	Arg	Arg	Ile	Ala	Met	Leu	Glu	Pro	Leu
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Ala	Ile	Ala	Asp	Arg	Leu	Arg	Asp	Pro	Asp	Ser	His	Ile	Val	Lys	Lys
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Ile	Asn	Asn	Leu	Asn	Lys	Ser	Ala	Leu	Lys	Tyr	Tyr	Gln	Leu	Phe	Leu
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Asp	Ser	Leu	Arg	Asp	Pro	Asn	Lys	Val	Phe	Pro	Glu	His	Ile	Gly	Glu
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Tyr	Gly	Lys	Ile	Ile	Thr	Ala	Asp	Pro	Lys	Lys	Glu	Leu	Glu	Asn	Leu
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Cys	Glu	Lys	Ala	Arg	Pro	His	Leu	Cys	Ser	Ser	Gly	Pro	Cys	Arg	Asn										
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Tyr	Arg	Phe	Thr	Gly	Arg	His	Cys	Glu	Ile	Gly	Lys	Pro	Asp	Ser	Cys										
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Ala	Ser	Gly	Pro	Cys	His	Asn	Gly	Gly	Thr	Cys	Phe	His	Tyr	Ile	Gly										
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Lys	Tyr	Lys	Cys	Asp	Cys	Pro	Pro	Gly	Phe	Ser	Gly	Arg	His	Cys	Glu										
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Ile	Ala	Pro	Ser	Pro	Cys	Phe	Arg	Ser	Pro	Cys	Val	Asn	Gly	Gly	Thr										
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Cys	Glu	Asp	Arg	Asp	Thr	Asp	Phe	Phe	Cys	His	Cys	Gln	Ala	Gly	Tyr										
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Met	Gly	Arg	Arg	Cys	Gln	Ala	Glu	Val	Asp	Cys	Gly	Pro	Pro	Glu	Glu										
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&lt;210&gt; 5329

&lt;211&gt; 2582

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5329

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Ala Thr Trp Val Phe Val Ala Thr Trp Tyr Arg Val Thr Phe Phe Gly															
	85	90	95												
Gly Ser Ser Ser Ser Pro Val Asn Thr Phe Gln Thr Val Leu Ile Thr															
	100	105	110												
Asp Gly Lys Leu Ser Phe Thr Ile Phe Asn Tyr Glu Ser Ile Val Trp															
	115	120	125												
Thr Thr Gly Thr His Ala Ser Ser Gly Gly Asn Ala Thr Gly Leu Gly															
	130	135	140												
Gly Ile Ala Ala Gln Ala Gly Phe Asn Ala Gly Asp Gly Gln Arg Tyr															
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	165	170	175												
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225	230	235	240												
Arg Arg Cys His Leu Asp Val Asn Glu Cys Ala Ser Gln Pro Cys Gln															
	245	250	255												
Asn Gly Gly Thr Cys Thr His Gly Ile Asn Ser Phe Arg Cys Gln Cys															
	260	265	270												
Pro Ala Gly Phe Gly Gly Pro Thr Cys Glu Thr Ala Gln Ser Pro Cys															
	275	280	285												
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Ser Ala Val Cys Val Cys Gln Ala Gly Tyr Thr Gly Ala Ala Cys Glu															
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Met Asp Val Asp Asp Cys Ser Pro Asp Pro Cys Leu Asn Gly Gly Ser															
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Lys Gly Leu Arg Cys Glu Thr Gly Asp His Pro Val Pro His Ala Cys															
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	420	425	430												
Gly Phe Ser Val Asn Leu Lys Ser Gln Pro Xaa Pro Cys Asn Met Asn															
	435	440	445												
Thr Gln Cys Pro Asp Gly Gly Tyr Cys Met Glu His Gly Gly Ser Tyr															
	450	455	460												
Leu Cys Val Cys His Thr Asp His Asn Ala Ser His Ser Leu Pro Ser															
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Pro Cys Asp Ser Asp Pro Cys Phe Asn Gly Gly Ser Cys Asp Ala His															

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&lt;210&gt; 5328

&lt;211&gt; 694

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5328

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&lt;210&gt; 5327

&lt;211&gt; 2084

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5327

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&lt;400&gt; 5325

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&lt;210&gt; 5326

&lt;211&gt; 234

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5326

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 Gly Ser Ala Gly Cys Val Leu Ala Gly Arg Leu Thr Glu Asp Pro Ala  
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 Glu Arg Val Leu Leu Leu Glu Ala Gly Pro Lys Asp Val Arg Ala Gly  
 65 70 75 80  
 Ser Lys Arg Leu Ser Trp Lys Ile His Met Pro Ala Ala Leu Val Ala  
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 Val Ser Cys Leu Pro Asp Pro Gly Arg  
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 <213> Homo sapiens

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&lt;210&gt; 5322

&lt;211&gt; 209

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5322

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Asp	Ser	Pro	Asn	Val	Tyr	Thr	Glu	Lys	Lys	Glu	Ile	Ala	Ile	Leu	Arg
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Glu	Arg	Leu	Thr	Glu	Leu	Glu	Arg	Lys	Leu	Thr	Phe	Glu	Gln	Gln	Arg
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Lys	Gln	Gly	Thr	Asp	Gly	Lys	Lys	Lys	Gly	Gly	Arg	Gly	Ser	His	Arg
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Glu	Lys	Ile	Lys	Gln	Ala	Lys	Glu	Ala	Val	Lys	Glu	Asn	Leu	Lys	Lys
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Phe	Ser	Asp	Ser	Val	Lys	Ser	Thr	Phe	Arg	His	Phe	Lys	Asp	Thr	Thr
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<211> 96

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<211> 6324

<212> DNA

<213> Homo sapiens

<400> 5321

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4488

4487

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Arg Leu Gln Phe Lys Val Val Asp Leu Glu Gln Thr Asn Leu Asp Glu		
65	70	75
Asp Gly Ala Ser Ala Leu Phe Asp Met Ile Glu Tyr Tyr Glu Ser Ala		80
	85	90
Thr His Leu Asn Ile Ser Phe Asn Lys His Ile Gly Thr Arg Gly Trp		95
	100	105
Gln Ala Ala Ala His Met Met Arg Lys Thr Ser Cys Leu Gln Tyr Leu		110
	115	120
Asp Ala Arg Asn Thr Pro Leu Leu Asp His Ser Ala Pro Phe Val Ala		125
	130	135
Arg Ala Leu Arg Ile Arg Ser Ser Leu Ala Val Leu His Leu Glu Asn		140
145	150	155
Ala Ser Leu Ser Gly Arg Pro Leu Met Leu Leu Ala Thr Ala Leu Lys		160
	165	170
Met Asn Met Asn Leu Arg Glu Leu Tyr Leu Ala Asp Asn Lys Leu Asn		175
	180	185
Gly Leu Gln Asp Ser Ala Gln Leu Gly Asn Leu Leu Lys Phe Asn Cys		190
	195	200
Ser Leu Gln Ile Leu Asp Leu Arg Asn Asn His Val Leu Asp Ser Gly		205
	210	215
Leu Ala Tyr Ile Cys Glu Gly Leu Lys Glu Gln Arg Lys Gly Leu Val		220
225	230	235
Thr Leu Val Leu Trp Asn Asn Gln Leu Thr His Thr Gly Met Ala Phe		240
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Leu Gly Met Thr Leu Ser His Thr Gln Ser Leu Glu Thr Leu Asn Leu		255
	260	265
Gly His Asn Pro Ile Gly Asn Glu Gly Val Arg His Leu Lys Asn Gly		270
	275	280
Leu Ile Ser Asn Arg Ser Val Leu Arg Leu Gly Leu Ala Ser Thr Lys		285
	290	295
Leu Thr Cys Glu Gly Ala Val Ala Val Ala Glu Phe Ile Ala Glu Ser		300
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Pro Arg Leu Leu Arg Leu Asp Leu Arg Glu Asn Glu Ile Lys Thr Gly		320
	325	330
Gly Leu Met Ala Leu Ser Leu Ala Leu Lys Val Asn His Ser Leu Leu		335
	340	345
Arg Leu Asp Leu Asp Arg Glu Pro Lys Lys Glu Ala Val Lys Ser Phe		350
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Ile Glu Thr Gln Lys Ala Leu Leu Ala Glu Ile Gln Asn Gly Cys Lys		365
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385	390	395
Gln Leu Ser Ala Ser Met Pro Glu Thr Thr Ala Thr Glu Pro Gln Pro		400
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Asp Asp Glu Pro Ala Ala Gly Val Gln Asn Gly Ala Pro Ser Pro Ala		415
	420	425
Pro Ser Pro Asp Ser Asp Ser Asp Ser Asp Ser Asp Gly Glu Glu Glu		430
	435	440
Glu Glu Glu Glu Gly Glu Arg Asp Glu Thr Pro Ser Gly Ala Ile Asp		445
	450	455
Thr Arg Asp Thr Gly Ser Ser Glu Pro Gln Pro Pro Pro Glu Pro Pro		460
465	470	475
Arg Ser Gly Pro Pro Leu Pro Asn Gly Leu Lys Pro Glu Phe Ala Leu		480

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&lt;210&gt; 5316

&lt;211&gt; 544

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5316

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Gln	Lys	Leu	Asn	Cys	Arg	Gln	Ile	Pro	Lys	Leu	Leu	Arg	Gln	Leu	Gln
			20					25					30		
Glu	Phe	Thr	Asp	Leu	Gly	His	Arg	Leu	Asp	Cys	Leu	Asp	Leu	Lys	Gly
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Glu	Lys	Leu	Asp	Tyr	Lys	Thr	Cys	Glu	Ala	Leu	Glu	Glu	Val	Phe	Lys

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Cys Thr Gly Ser Leu His Phe Val His Gln Ala Tyr Leu Gln Gln Trp
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Ile Lys Ser Ser Asp Thr Arg Cys Cys Glu Leu Cys Lys Tyr Glu Phe
      35           40           45
Ile Met Glu Thr Lys Leu Lys Pro Leu Arg Lys Trp Glu Lys Leu Gln
      50           55           60
Met Thr Ser Ser Glu Arg Arg Lys Ile Met Cys Ser Val Thr Phe His
      65           70           75           80
Val Ile Ala Ile Thr Cys Val Val Trp Ser Leu Tyr Val Leu Ile Asp
      85           90           95
Arg Pro Ala Glu Glu Ile Lys Gln Gly Gln Ala Thr Gly Ile Leu Glu
      100          105          110
Trp Pro Phe Trp Thr Lys Leu Val Val Val Ala Ile Gly Phe Thr Arg
      115          120          125
Gly Leu Leu Phe Met Tyr Val Gln Cys Lys Val Tyr Val Gln Leu Trp
      130          135          140
Lys Arg Leu Lys Ala Tyr Asn Arg Val Ile Tyr Val Gln Asn Cys Pro
      145          150          155          160
Glu Thr Ser Lys Lys Asn Ile Phe Glu Lys Ser Pro Leu Thr Glu Pro
      165          170          175
Asn Phe Glu Asn Lys His Gly Tyr Gly Ile Cys His Ser Asp
      180          185          190

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&lt;210&gt; 5313

&lt;211&gt; 322

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5313

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&lt;210&gt; 5314

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5314

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	245	250
Thr Ala Glu Arg Ser His Arg Gly Glu Gly Glu Glu Asp His Glu Ser		255
	260	265
Pro Ser Ser Gly Arg Val Pro Ala Pro Asp Thr Ser Ile Glu Glu Thr		270
	275	280
Glu Ser Asp Ala Ser Ser Asp Ser Glu Asp Val Ser Ala Val Val Ala		285
	290	295
Gln His Ser Leu Thr Gln Gln Arg Leu Leu Val Ser Asn Ala Asn Gln		300
305	310	315
Thr Val Pro Asp Arg Ser Asp Arg Ser Gly Thr Asp Arg Ser Val Ala		320
	325	330
Gly Gly Gly Thr Val Ser Val Ser Val Arg Ser Arg Arg Pro Asp Gly		335
	340	345
Gln Cys Thr Val Thr Glu Val		350
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&lt;210&gt; 5311

&lt;211&gt; 572

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5311

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&lt;210&gt; 5312

&lt;211&gt; 190

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5312

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 1920  
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 2078

<210> 5310

<211> 359

<212> PRT

<213> Homo sapiens

<400> 5310

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	20							25					30		
Thr	Val	Pro	Glu	Cys	Ala	Ile	Cys	Leu	Gln	Thr	Cys	Val	His	Pro	Val
	35						40					45			
Ser	Leu	Pro	Cys	Lys	His	Val	Phe	Cys	Tyr	Leu	Cys	Val	Lys	Gly	Ala
	50					55					60				
Ser	Trp	Leu	Gly	Lys	Arg	Cys	Ala	Leu	Cys	Arg	Gln	Glu	Ile	Pro	Glu
65					70					75				80	
Asp	Phe	Leu	Asp	Lys	Pro	Thr	Leu	Leu	Ser	Pro	Glu	Glu	Leu	Lys	Ala
			85					90					95		
Ala	Ser	Arg	Gly	Asn	Gly	Glu	Tyr	Ala	Trp	Tyr	Tyr	Glu	Gly	Arg	Asn
			100					105					110		
Gly	Trp	Trp	Gln	Tyr	Asp	Glu	Arg	Thr	Ser	Arg	Glu	Leu	Glu	Asp	Ala
		115					120					125			
Phe	Ser	Lys	Gly	Lys	Lys	Asn	Thr	Glu	Met	Leu	Ile	Ala	Gly	Phe	Leu
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			165					170					175		
Gly	Val	Ala	Gly	Leu	Arg	Leu	Asp	Cys	Asp	Ala	Asn	Thr	Val	Asn	Leu
			180				185					190			
Ala	Arg	Glu	Ser	Ser	Ala	Asp	Gly	Ala	Asp	Ser	Val	Ser	Ala	Gln	Ser
		195				200						205			
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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5309

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&lt;210&gt; 5308

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5308

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Ser	Leu	Cys	Tyr	Pro	Gln	Ile	His	Lys	Leu	Arg	Ile	Thr	Cys	Ile	His
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&lt;211&gt; 2078

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&lt;211&gt; 1339

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&lt;213&gt; Homo sapiens

&lt;400&gt; 5302

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 Val Lys Val Asn Arg Leu Phe Glu Ala Gln Gly Lys Pro Glu Leu Lys  
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 Gly Phe Asn Leu Asn Pro Leu Asn Gln Asp Glu Leu Lys Ala Leu Lys  
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 Val Ile Leu Lys Gly  
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 <211> 5318  
 <212> DNA  
 <213> Homo sapiens

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290

&lt;210&gt; 5295

&lt;211&gt; 1451

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5295

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<211> 290

<212> PRT

<213> Homo sapiens

<400> 5294

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Gln	Leu	Arg	Gly	Ala	Val	Met	Ile	Val	Tyr	Pro	Met	Gly	Leu	Pro	Pro
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Tyr	Asp	Pro	Ile	Arg	Met	Glu	Phe	Glu	Asn	Lys	Glu	Asp	Leu	Ser	Gly
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Trp	Ala	Ala	Lys	Glu	Leu	Arg	Arg	Thr	Lys	Lys	Leu	Ser	Asp	Tyr	Val
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Gln	Leu	Met	Leu	Tyr	Tyr	His	Arg	Arg	Gln	Glu	Glu	Leu	Lys	Arg	Leu
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Glu	Glu	Asn	Asp	Asp	Asp	Ala	Tyr	Leu	Asn	Ser	Pro	Trp	Ala	Asp	Asn
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Thr	Ala	Leu	Lys	Arg	His	Phe	His	Gly	Val	Lys	Asp	Ile	Lys	Trp	Arg
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Pro	Arg														

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Arg	Gly	Gln	Arg	His	Thr	Val	Ala	Ala	Pro	Ala	Xaa	Arg	Ala	Arg
				85					90				95	
Gly	Ala	Glu	Pro	His	Ala	Ala	Ala	Ala	Pro	Arg	Arg	Leu	Pro	His
			100					105				110		
Pro	Pro	Pro	Arg	Ala	Gly	His	Pro	Ala	Pro	Gln	Leu	Ala	Gly	Trp
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Gln	Ala	Pro	Arg	Leu	Lys	Arg	Thr	Val	Pro	Val	Arg	Arg	Ser	
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&lt;210&gt; 5293

&lt;211&gt; 1428

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5293

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<213> Homo sapiens
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<213> Homo sapiens
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 Ser Met Asn Ser Leu Arg Lys Ser Asn Thr Leu Cys Asp Val Thr Leu  
 85                      90                      95  
 Arg Val Glu Gln Lys Asp Phe Pro Ala His Arg Ile Val Leu Ala Ala  
 100                      105                      110  
 Cys Ser Asp Tyr Phe Cys Ala Met Phe Thr Ser Glu Leu Ser Glu Lys  
 115                      120                      125  
 Gly Lys Pro Tyr Val Asp Ile Gln Gly Leu Thr Ala Ser Thr Met Glu  
 130                      135                      140  
 Ile Leu Leu Asp Phe Val Tyr Thr Glu Thr Val His Val Thr Val Glu  
 145                      150                      155                      160  
 Asn Val Gln Glu Leu Leu Pro Ala Ala Cys Leu Leu Gln Leu Lys Gly  
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<210> 5290  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

<400> 5290  
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 Lys Lys Leu Ile Leu Ile Gly Ala Thr Leu Lys Lys Lys Leu Glu His  
 35                      40                      45  
 Gly Leu Thr Arg Ile Trp Gln Asp Val Gln Leu Lys Val Lys Thr Tyr

530                      535                      540  
 Ala Cys Asp Glu Ser Val Leu Met Asp Leu Lys Ala Leu Leu Leu Glu  
 545                      550                      555                      560  
 Ala Lys Gln Lys Val Pro Pro Val Leu Gln Val Leu His Cys Gly Asp  
                          565                      570                      575  
 Glu Ser Met Leu Asp Ile Gly Gly Glu Arg Gly Cys Ala Phe Cys Gly  
                          580                      585                      590  
 Gly Leu Gly His Arg Ile Thr Asp Cys Pro Lys Leu Glu Ala Met Gln  
                          595                      600                      605  
 Thr Lys Gln Val Ser Asn Ile Gly Arg Lys Asp Tyr Leu Ala His Ser  
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 Ser Met Asp Phe  
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&lt;210&gt; 5287

&lt;211&gt; 581

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5287

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&lt;210&gt; 5288

&lt;211&gt; 193

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5288

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 Glu Pro Pro Ala Ser Pro Ala Pro His Ser Ile Pro Thr Gly Trp Gly  
                          20                      25                      30  
 Arg Ala Arg Cys Gly Cys Val Gly Ser Gly Ala Glu Leu Gln Asn Pro  
                          35                      40                      45  
 Arg Thr His Phe Val Leu Ser Pro His Cys Phe Met Gly Gly Ile Met

100 105 110  
 Glu Lys Gln Leu Lys Glu Glu Glu Lys Ile Leu Glu Ser Val Ala Glu  
 115 120 125  
 Gly Arg Ala Leu Met Ser Val Lys Glu Met Ala Lys Gly Ile Thr Tyr  
 130 135 140  
 Asp Asp Pro Ile Lys Thr Ser Trp Thr Pro Pro Arg Tyr Val Leu Ser  
 145 150 155 160  
 Met Ser Glu Glu Arg His Glu Arg Val Arg Lys Lys Tyr His Ile Leu  
 165 170 175  
 Val Glu Gly Asp Gly Ile Pro Pro Pro Ile Lys Ser Phe Lys Glu Met  
 180 185 190  
 Lys Phe Pro Ala Ala Ile Leu Arg Gly Leu Lys Lys Lys Gly Ile His  
 195 200 205  
 His Pro Thr Pro Ile Gln Ile Gln Gly Ile Pro Thr Ile Leu Ser Gly  
 210 215 220  
 Arg Asp Met Ile Gly Ile Ala Phe Thr Gly Ser Gly Lys Thr Leu Val  
 225 230 235 240  
 Phe Thr Leu Pro Val Ile Met Phe Cys Leu Glu Gln Glu Lys Arg Leu  
 245 250 255  
 Pro Phe Ser Lys Arg Glu Gly Pro Tyr Gly Leu Ile Ile Cys Pro Ser  
 260 265 270  
 Arg Glu Leu Ala Arg Gln Thr His Gly Ile Leu Glu Tyr Tyr Cys Arg  
 275 280 285  
 Leu Leu Gln Glu Asp Ser Ser Pro Leu Leu Arg Cys Ala Leu Cys Ile  
 290 295 300  
 Gly Gly Met Ser Val Lys Glu Gln Met Glu Thr Ile Arg His Gly Val  
 305 310 315 320  
 His Met Met Val Ala Thr Pro Gly Arg Leu Met Asp Leu Leu Gln Lys  
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 Lys Met Val Ser Leu Asp Ile Cys Arg Tyr Leu Ala Leu Asp Glu Ala  
 340 345 350  
 Asp Arg Met Ile Asp Met Gly Phe Glu Gly Asp Ile Arg Thr Ile Phe  
 355 360 365  
 Ser Tyr Phe Lys Gly Gln Arg Gln Thr Leu Leu Phe Ser Ala Thr Met  
 370 375 380  
 Pro Lys Lys Ile Gln Asn Phe Ala Lys Ser Ala Leu Val Lys Pro Val  
 385 390 395 400  
 Thr Ile Asn Val Gly Arg Ala Gly Ala Ala Ser Leu Asp Val Ile Gln  
 405 410 415  
 Glu Val Glu Tyr Val Lys Glu Glu Ala Lys Met Val Tyr Leu Leu Glu  
 420 425 430  
 Cys Leu Gln Lys Thr Pro Pro Pro Val Leu Ile Phe Ala Glu Lys Lys  
 435 440 445  
 Ala Asp Val Asp Ala Ile His Glu Tyr Leu Leu Leu Lys Gly Val Glu  
 450 455 460  
 Ala Val Ala Ile His Gly Gly Lys Asp Gln Glu Glu Arg Thr Lys Ala  
 465 470 475 480  
 Ile Glu Ala Phe Arg Glu Gly Lys Lys Asp Val Leu Val Ala Thr Asp  
 485 490 495  
 Val Ala Ser Lys Gly Leu Asp Phe Pro Ala Ile Gln His Val Ile Asn  
 500 505 510  
 Tyr Asp Met Pro Glu Glu Ile Glu Asn Tyr Val His Arg Ile Gly Arg  
 515 520 525  
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&lt;210&gt; 5286

&lt;211&gt; 628

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5286

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		20						25					30		
Asp	Glu	Asp	Asp	Glu	Asp	Tyr	Val	Pro	Tyr	Val	Pro	Leu	Arg	Gln	Arg
	35					40						45			
Arg	Gln	Leu	Leu	Leu	Gln	Lys	Leu	Leu	Gln	Arg	Arg	Arg	Lys	Gly	Ala
	50					55					60				
Ala	Glu	Glu	Glu	Gln	Gln	Asp	Ser	Gly	Ser	Glu	Pro	Arg	Gly	Asp	Glu
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Asp	Asp	Ile	Pro	Leu	Gly	Pro	Gln	Ser	Asn	Val	Ser	Leu	Leu	Asp	Gln
			85					90						95	
His	Gln	His	Leu	Lys	Glu	Lys	Ala	Glu	Ala	Arg	Lys	Glu	Ser	Ala	Lys

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Lys	Ala	Val	Ala	Lys	Gly	Asp	Leu	His	Gln	Ala	Ser	Thr	Ser	Ser	Arg
	210				215						220				
Arg	Ala	Leu	Phe	Leu	Ala	Val	Leu	Ser	Ile	Thr	Ile	Gly	Thr	Gly	Val
225				230						235				240	
Tyr	Val	Gly	Val	Ala	Val	Ala	Leu	Ile	Ala	Tyr	Leu	Ser	Lys	Asn	Asn
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His Leu

&lt;210&gt; 5285

&lt;211&gt; 2155

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5285

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1140

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 cacagctacc cgcagcaat acgcactctt gggacctcgc tgatctagga tggggaggca  
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 1800  
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 1860  
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 1920  
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 1980  
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 1989

&lt;210&gt; 5284

&lt;211&gt; 258

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5284

Met	Asp	Gly	Ile	Ile	Glu	Gln	Lys	Ser	Met	Leu	Val	His	Ser	Lys	Ile
1			5					10						15	
Ser	Asp	Ala	Gly	Lys	Arg	Asn	Gly	Leu	Ile	Asn	Thr	Arg	Asn	Leu	Met
		20						25					30		
Ala	Glu	Ser	Arg	Asp	Gly	Leu	Val	Ser	Val	Tyr	Pro	Ala	Pro	Gln	Tyr
		35					40					45			
Gln	Ser	His	Arg	Val	Gly	Ala	Ser	Thr	Val	Pro	Ala	Ser	Leu	Asp	Ser
	50					55				60					
Ser	Arg	Ser	Glu	Pro	Met	Gln	Gln	Leu	Leu	Asp	Pro	Asn	Thr	Leu	Gln
65				70					75					80	
Gln	Ser	Val	Glu	Ser	Arg	Tyr	Arg	Pro	Asn	Ile	Ile	Leu	Tyr	Ser	Glu
		85						90					95		
Gly	Val	Leu	Arg	Ser	Trp	Gly	Asp	Gly	Val	Ala	Ala	Asp	Cys	Cys	Glu
		100						105				110			
Thr	Thr	Phe	Ile	Glu	Asp	Arg	Ser	Pro	Thr	Lys	Asp	Ser	Leu	Glu	Tyr
	115					120					125				
Pro	Asp	Gly	Lys	Phe	Ile	Asp	Leu	Ser	Ala	Asp	Asp	Ile	Lys	Ile	His
130					135						140				
Thr	Leu	Ser	Tyr	Asp	Val	Glu	Glu	Glu	Glu	Phe	Gln	Glu	Leu	Glu	
145				150				155					160		
Ser	Asp	Tyr	Ser	Ser	Asp	Thr	Glu	Ser	Glu	Asp	Asn	Phe	Leu	Met	Met
		165						170					175		
Pro	Pro	Arg	Asp	His	Leu	Gly	Leu	Ser	Val	Phe	Ser	Met	Leu	Cys	Cys
		180					185						190		
Phe	Trp	Pro	Leu	Gly	Ile	Ala	Ala	Phe	Tyr	Leu	Ser	His	Glu	Thr	Asn

85

90

&lt;210&gt; 5283

&lt;211&gt; 1989

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5283

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120  
atggatggca tcattgaaca gaagagcatg ctggtgcaca gtaaaatcag tgatgctggc  
180  
aagaggaatg gtttaattaa caccagaaac ttgatggccg agagcagaga tggctctggg  
240  
tctgtttacc cagcgcccca gtaccagagc caccgggtgg gggccagcac agtgccggcc  
300  
agcctggaca gcagcaggag tgagccgatg cagcagctgc tggaccccaa caccctgcag  
360  
cagtcatggg agtcccgcga ccggcccaac atcatcctct attcagaggg cgtgctgcgc  
420  
tcctgggggg acggtgtggc cgccgactgc tgcgagacca ccttcacga ggaccggtcg  
480  
cccaccaaag acagcctcga gtaccgggat gggaagtcca ttgaccttc agctgatgac  
540  
ataaaaatcc acaccctgtc ctacgatgtg gaggaggagg aggagttcca ggagctggag  
600  
agcgactact caagcgacac agagagtgtg gacaatttcc tcatgatgcc ccgcggggac  
660  
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720  
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780  
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960  
ataccgcatg atgctgtaca gtacaaatga ttgccaaatg atgccacgaa gccctgggat  
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1140  
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1200  
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1260  
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1380

275	280	285
Lys Glu Ser Leu Val Ile Asp Arg Pro Arg Val Arg Lys Gln Thr Lys		
290	295	300
His Tyr Asn Ser Phe Glu Glu Asp Glu Leu Met Glu Phe Ser Glu Leu		
305	310	315
Asp Ser Asp Ser Asp Glu Arg Pro Thr Arg Ser Arg Arg Leu Asn Asp		
	325	330
Lys Ala Arg Arg Tyr Leu Arg Ala Glu Cys Phe Arg Val Glu Lys Asn		
	340	345
Leu Leu Ile Phe Gly Trp Gly Arg Trp Lys Asp Ile Leu Thr His Gly		
	355	360
Arg Phe Lys Trp His Leu Asn Glu Lys Asp Met Glu Met Ile Cys Arg		
	370	375
Ala Leu Leu Val Tyr Cys Val Lys His Tyr Lys Gly Asp Glu Lys Ile		
385	390	395
Lys Ser Phe Ile Trp Glu Leu Ile		400
	405	

&lt;210&gt; 5281

&lt;211&gt; 336

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5281

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 60  
 aaatgcaaac cgcccaaaat aaataccagg agcttaagaa tatttgcagc tatagggctc  
 120  
 aggcattcct ggtactcaca ggtctgacag ccacagttgg agacacagct atttcttcag  
 180  
 aagagaaaac acaacgcattg tcattaatga gacatcacat gggacaatca ttgtccaaag  
 240  
 aagttgcaca tgtcctcacc aaacctggag cagatcacga ttgggaaaac ctagagaaaag  
 300  
 acttgagatt gtcattaat ggggattatg aagaag  
 336

&lt;210&gt; 5282

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5282

Met Gln Thr Ala Gln Asn Lys Tyr Gln Glu Leu Lys Asn Ile Cys Ser		
1	5	10
Tyr Arg Ala Gln Ala Phe Leu Val Leu Thr Gly Leu Thr Ala Thr Val		
	20	25
Gly Asp Thr Ala Ile Ser Ser Glu Glu Lys Thr Gln Arg Met Ser Leu		
	35	40
Met Arg His His Met Gly Gln Ser Leu Ser Lys Glu Val Ala His Val		
	50	55
Leu Thr Lys Pro Gly Ala Asp His Asp Trp Glu Asn Leu Glu Lys Asp		
65	70	75
Leu Arg Leu Leu Ile Asn Gly Asp Tyr Glu Glu		80

aagcagacca aacactacaa ctcgtttgag gaagacgagc tcatggagtt ttcagagtta  
960  
gacagcgact cagacgaaag gcccacgaga tccaggcgcc tcaatgacaa agccaggcgc  
1020  
tacctccgag cggagtgcct ccgggtagag aagaacctgc tcatctttgg ctggggccgg  
1080  
tggaaggaca tctgactca tggccgattc aagtggcatt tgaacgagaa ggacatggag  
1140  
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1200  
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1225

<210> 5280

<211> 408

<212> PRT

<213> Homo sapiens

<400> 5280

Ile	Asn	Gly	Ala	Glu	Glu	Lys	Ile	Leu	Glu	Asp	Phe	Arg	Lys	Thr	His
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Ser	Pro	Asp	Ala	Pro	Asp	Phe	Gln	Leu	Gln	Ala	Met	Ile	Gln	Ala	Ala
			20					25					30		
Gly	Lys	Leu	Val	Leu	Ile	Asp	Lys	Leu	Leu	Pro	Lys	Leu	Ile	Ala	Gly
		35					40					45			
Gly	His	Lys	Val	Leu	Ile	Phe	Ser	Gln	Met	Val	Arg	Cys	Leu	Asp	Ile
	50					55					60				
Leu	Glu	Asp	Tyr	Leu	Ile	Gln	Arg	Arg	Tyr	Thr	Tyr	Glu	Arg	Ile	Asp
65					70					75				80	
Gly	Arg	Val	Arg	Gly	Asn	Leu	Arg	Gln	Ala	Ala	Ile	Asp	Arg	Phe	Ser
				85				90						95	
Lys	Pro	Asp	Ser	Asp	Arg	Phe	Val	Phe	Leu	Leu	Cys	Thr	Arg	Ala	Gly
			100					105					110		
Gly	Leu	Gly	Ile	Asn	Leu	Thr	Ala	Ala	Asp	Thr	Cys	Ile	Ile	Phe	Asp
		115				120						125			
Ser	Asp	Trp	Asn	Pro	Gln	Asn	Asp	Leu	Gln	Ala	Gln	Ala	Arg	Cys	His
		130				135					140				
Arg	Ile	Gly	Gln	Ser	Lys	Ala	Val	Lys	Val	Tyr	Arg	Leu	Ile	Thr	Arg
145					150					155				160	
Asn	Ser	Tyr	Glu	Arg	Glu	Met	Phe	Asp	Lys	Ala	Ser	Leu	Lys	Leu	Gly
			165					170						175	
Leu	Asp	Lys	Ala	Val	Leu	Gln	Thr	Ser	Thr	Glu	Arg	Ala	Ala	Pro	Met
			180					185					190		
Gly	Thr	Ala	Leu	Ser	Lys	Met	Glu	Val	Glu	Asp	Leu	Leu	Arg	Lys	Gly
		195				200					205				
Ala	Tyr	Gly	Ala	Leu	Met	Asp	Glu	Glu	Asp	Glu	Gly	Ser	Lys	Phe	Cys
	210				215						220				
Glu	Glu	Asp	Ile	Asp	Gln	Ile	Leu	Gln	Arg	Arg	Thr	His	Thr	Ile	Thr
225					230				235					240	
Ile	Gln	Ser	Glu	Gly	Lys	Gly	Ser	Thr	Phe	Ala	Lys	Ala	Ser	Phe	Val
			245					250						255	
Ala	Ser	Gly	Asn	Arg	Thr	Asp	Ile	Ser	Leu	Asp	Asp	Pro	Asn	Phe	Trp
			260					265					270		
Gln	Lys	Trp	Ala	Lys	Ile	Ala	Glu	Leu	Asp	Thr	Glu	Ala	Lys	Asn	Glu

&lt;400&gt; 5278

Ile Tyr Asp Phe Met Asp Asp Pro Lys Pro His Lys Lys Leu Gly Pro  
 1 5 10 15  
 Gln Ala Trp Leu Val Ala Ala Ile Thr Ala Thr Glu Leu Leu Ile Val  
 20 25 30  
 Val Lys Tyr Asp Pro His Thr Leu Thr Leu Ser Leu Pro Phe Tyr Ile  
 35 40 45  
 Ser Gln Cys Trp Thr Leu Gly Ser Val Leu Ala Leu Thr Trp Thr Val  
 50 55 60  
 Trp Arg Phe Phe Leu Arg Asp Ile Thr Leu Arg Tyr Lys Glu Thr Arg  
 65 70 75 80  
 Trp Gln Lys Trp Gln Asn Lys Asp Asp Gln Gly Ser Thr Val Gly Asn  
 85 90 95  
 Gly Asp Gln His Pro Leu Gly Leu Asp Glu Asp Leu Leu Gly Pro Gly  
 100 105 110  
 Val Ala Glu Gly Glu Gly Ala Pro Thr Pro Asn  
 115 120

&lt;210&gt; 5279

&lt;211&gt; 1225

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5279

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 60  
 cctgactttc agctgcaggc catgattcag gcagcaggaa agcttgtgtt gattgataaa  
 120  
 ctactcccta agctgattgc aggtggccac aaagtactca ttttctccca gatggtgcgc  
 180  
 tgcctcgaca tcctagaaga ttatttaatc cagagaagat acacctatga acgtattgat  
 240  
 gggcgagtac ggggaaacct gcgccaggct gccatcgacc gcttcagcaa gcctgactca  
 300  
 gaccgctttg tcttcttact gtgcaccaga gcgggaggcc tggggatcaa tctcacagct  
 360  
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 420  
 gcccgatgtc accgcatagg ccagagcaaa gctgtgaagg tgtatcgctt catcactcga  
 480  
 aattcctacg agcgcgagat gtttgacaag gccagcctaa agctggggct ggacaaggct  
 540  
 gttcttcaga catcaaccga aagggcggca ccaatgggta cagcactctc aaaaatggag  
 600  
 gtggaggacc tactccggaa aggtgcttat ggagccttaa tggatgaaga agatgaaggc  
 660  
 tccaagttct gtgaagaaga catagaccag attctgcaga ggcgaacgca caccatcacc  
 720  
 atccagtctg aggggaaagg gtccactttt gccaaaggcta gctttgtggc ttcaggaaac  
 780  
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 840  
 ctagacactg aagcaaagaa tgaaaaggaa agcttagtga tcgaccgacc tcgctgaga  
 900

<213> Homo sapiens

<400> 5276

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Met Ala Met Gln Ala Ala Lys Arg Ala Asn Ile Arg Leu Pro Pro Glu
 1             5             10             15
Val Asn Arg Ile Leu Tyr Ile Arg Asn Leu Pro Tyr Lys Ile Thr Ala
      20             25             30
Glu Glu Met Tyr Asp Ile Phe Gly Lys Tyr Gly Pro Ile Arg Gln Ile
      35             40             45
Arg Val Gly Asn Thr Pro Glu Thr Arg Gly Thr Ala Tyr Val Val Tyr
      50             55             60
Glu Asp Ile Phe Asp Ala Lys Asn Ala Cys Asp His Leu Ser Gly Phe
      65             70             75             80
Asn Val Cys Asn Arg Tyr Leu Val Val Leu Tyr Tyr Asn Ala Asn Arg
      85             90             95
Ala Phe Gln Lys Met Asp Thr Lys Lys Lys Glu Glu Gln Leu Lys Leu
      100            105            110
Leu Lys Glu Lys Tyr Gly Ile Asn Thr Asp Pro Pro Lys
      115            120            125

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<210> 5277

<211> 612

<212> DNA

<213> Homo sapiens

<400> 5277

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120
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420
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480
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600
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612

```

<210> 5278

<211> 123

<212> PRT

<213> Homo sapiens

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65          70          75          80
Ser Gly Ile Thr Tyr Leu Gly Ile Lys Ala Asn Asp Thr Gln Glu Phe
          85          90          95
Asn Leu Ser Ala Tyr Phe Glu Arg Ala Ala Asp Phe Ile Asp Gln Ala
          100          105          110
Leu Ala Gln Lys Asn Gly Arg Val Leu Val His Cys Arg Glu Gly Tyr
          115          120          125
Ser Arg Ser Pro Thr Leu Val Ile Ala Tyr Leu Met Met Arg Gln Lys
          130          135          140
Met Asp Val Lys Ser Ala Leu Ser Ile Val Arg Gln Asn Arg Glu Ile
          145          150          155          160
Gly Pro Asn Asp Gly Phe Leu Ala Gln Leu Cys Gln Leu Asn Asp Arg
          165          170          175
Leu Ala Lys Glu Gly Lys Leu Lys Pro
          180          185

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&lt;210&gt; 5275

&lt;211&gt; 810

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5275

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cgtctcagcg taagacggcg ctattccgct gtaacagctt ccggcgggctc ctggatgttg
120
atgtcctgca tctaacgcgg tgtgaccccc gaagccgagc gagctccgga ggaatttcag
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240
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300
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360
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540
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600
acattttcat ttggactaaa tcccacgaat gacaactacc accttttttt cctttttaat
660
taatactaaa tattgtgatt tcttatttga ggttcaaaat gacctgcttg aaactttgat
720
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780
tcgacgcggc cggcaattta gtagtagtag
810

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&lt;210&gt; 5276

&lt;211&gt; 125

&lt;212&gt; PRT

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 3540  
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 3600  
 cacatgcca gctgcggtg ggagctgttc ctggacagcc ttctactgcc tgggaagtga  
 3660  
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 3720  
 acagagcacc atccaggcaa aattagagcg ccaaattggtt ttcttctcaa tcttaaagca  
 3780  
 gtataccttt ccacaggctc gtctgtgtcc ctgccactct gagttatcca gaaaccacca  
 3840  
 cctacaaatg aggggactca tctagaagac ctctaaggctc cccttttggc tctgaggggt  
 3900  
 ctctaataat cccacttgg aattcagcac cgcaaggaaa ttatgggtat gtgagccata  
 3960  
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 aatgttggtg ccttttgtgc cacaagttaa gatgctactg ttttaaagga aaaaaaaaaa  
 4080  
 aaaaaagtac tgatcttcaa tatgaagaca tgagcttttc tcgcaggaaa ttttctttt  
 4140  
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 4200  
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 4320  
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 4380  
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 4440  
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 4500  
 gaaatttgaa aaaaccccc atttcccccc aacagtgacc cggaacactc ctcattctat  
 4560  
 taattacacc attctcccat  
 4580

&lt;210&gt; 5274

&lt;211&gt; 185

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5274

Met Ser Gly Ser Phe Glu Leu Ser Val Gln Asp Leu Asn Asp Leu Leu  
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 Ser Asp Gly Ser Gly Cys Tyr Ser Leu Pro Ser Gln Pro Cys Asn Glu  
 20 25 30  
 Val Thr Pro Arg Ile Tyr Val Gly Asn Ala Ser Val Ala Gln Asp Ile  
 35 40 45  
 Pro Lys Leu Gln Lys Leu Gly Ile Thr His Val Leu Asn Ala Ala Glu  
 50 55 60  
 Gly Arg Ser Phe Met His Val Asn Thr Asn Ala Asn Phe Tyr Lys Asp

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1980  
cctctcagaa acgcggccag aagacaagca ggaagtga aggtcccagg cacacaccct  
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2100  
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2220  
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2760  
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2820  
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2880  
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2940  
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3060  
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 Ser Val Glu Leu Val Asp Ile Gly Lys Gln Lys Leu Pro Asp Gly Ser  
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 Glu Ile Pro Leu Pro Pro Ile Leu Leu Gly Arg Leu Gly Ser Asp Pro  
 115 120 125  
 Gln Lys Lys Thr Val Cys Ile Tyr Gly His Leu Asp Val Gln Pro Ala  
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 Ala Leu Glu Asp Gly Trp Asp Ser Glu Pro Phe Thr Leu Val Glu Arg  
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 Asp Gly Lys Leu Tyr Gly Arg Gly Ser Thr Asp Asp Lys Gly Pro Val  
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 Ala Gly Trp Ile Asn Ala Leu Glu Ala Tyr Gln Lys Thr Gly Gln Glu  
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 Ser Glu Gly Leu Asp Glu Leu Ile Phe Ala Arg Lys Asp Thr Phe Phe  
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 Lys Lys Pro Cys Ile Thr Tyr Gly Leu Arg Gly Ile Cys Tyr Phe Phe  
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 Ile Glu Val Glu Cys Ser Asn Lys Asp Leu His Ser Gly Val Tyr Gly  
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 Gly Ser Val His Glu Ala Met Thr Asp Leu Ile Leu Leu Met Gly Ser  
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 Val Ala Ala Val Thr Glu Glu Glu His Lys Leu Tyr Asp Asp Ile Asp  
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 Phe Asp Ile Glu Glu Phe Ala Lys Asp Val Gly Ala Gln Ile Leu Leu  
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 His Ser His Lys Lys Asp Ile Leu Met His Arg Trp Arg Tyr Pro Ser  
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 Leu Ser Leu His Gly Ile Glu Gly Ala Phe Ser Gly Ser Gly Ala Lys  
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 Thr Val Ile Pro Lys Lys Val Val Gly Lys Phe Ser Ile Arg Leu Val  
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 Pro  
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&lt;210&gt; 5273

&lt;211&gt; 4580

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5273

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<210> 5272

<211> 385

<212> PRT

<213> Homo sapiens

<400> 5272

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Arg	Tyr	Ile	Lys	Pro	Val	Gln	Leu	Gln	Gln	Pro	Gln	Arg	Val	Ser	Leu
			20					25					30		
Glu	Cys	Gly	Asn	Val	Thr	Gly	Ala	Ser	Ser	Pro	Ser	Arg	Thr	Pro	Phe
			35				40					45			
Gln	Asn	Pro	Ser	Leu	Leu	Leu	Val	His	Lys	Gln	Lys	Leu	Ala	Lys	Trp
			50			55				60					
Val	Ala	Ile	Gln	Ser	Val	Ser	Ala	Trp	Pro	Glu	Lys	Arg	Gly	Glu	Ile
65				70					75					80	
Arg	Arg	Met	Met	Glu	Val	Ala	Ala	Ala	Asp	Val	Lys	Gln	Leu	Gly	Gly

&lt;400&gt; 5270

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Gln Pro Ile Ser Glu Glu Glu Ala Ile Gln Ile Ile Ala Asp Pro Pro
           35           40           45
Leu Pro Pro Ala Ser Phe Thr Leu Arg Asp Tyr Val Asp His Ser Glu
           50           55           60
Thr Leu Gln Lys Leu Val Leu Leu Gly Val Asp Leu Ser Lys Ile Glu
           65           70           75           80
Lys His Pro Glu Ala Ala Asn Leu Leu Leu Arg Leu Asp Phe Glu Lys
           85           90           95
Asp Ile Lys Gln Met Leu Leu Phe Leu Lys Asp Val Gly Ile Glu Asp
           100          105          110
Asn Gln Leu Gly Ala Phe Leu Thr Lys Asn His Ala Ile Phe Ser Glu
           115          120          125
Asp Leu Glu Asn Leu Lys Thr Arg Val Ala Tyr Leu His Ser Lys Asn
           130          135          140
Phe Ser Lys Ala Asp Val Ala Gln Met Val Arg Lys Ala Pro Phe Leu
           145          150          155          160
Leu Asn Phe Ser Val Glu Arg Leu Asp Asn Arg Leu Gly Phe Phe Gln
           165          170          175
Lys Glu Leu Glu Leu Ser Val Lys Lys Thr Arg Asp Leu Val Val Arg
           180          185          190
Leu Pro Arg Leu Leu Thr Gly Ser Leu Glu Pro Val Lys Glu Asn Met
           195          200          205
Lys Val Tyr Arg Leu Glu Leu Gly Phe Lys His Asn Glu Ile Gln His
           210          215          220
Met Ile Thr Arg Ile Pro Lys Met Leu Thr Ala Asn Lys Met Lys Leu
           225          230          235          240
Thr Glu Thr Phe Asp Phe Val His Asn Val Met Ser Ile Pro His His
           245          250          255
Ile Ile Val Lys Phe Pro Gln Val Phe Asn Thr Arg Leu Phe Lys Val
           260          265          270
Lys Glu Arg His Leu Phe Leu Thr Tyr Leu Gly Arg Ala Gln Tyr Asp
           275          280          285
Pro Ala Lys Pro Asn Tyr Ile Ser Leu Asp Lys Leu Val Ser Ile Pro
           290          295          300
Asp Glu Ile Phe Cys Glu Glu Ile Ala Lys Ala Ser Val Gln Asp Phe
           305          310          315          320
Glu Lys Phe Leu Lys Thr Leu
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&lt;210&gt; 5271

&lt;211&gt; 1185

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5271

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120

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275

&lt;210&gt; 5269

&lt;211&gt; 1177

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5269

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1080  
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1140  
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1177

&lt;210&gt; 5270

&lt;211&gt; 327

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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 720  
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 780  
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<210> 5268

<211> 279

<212> PRT

<213> Homo sapiens

<400> 5268

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 Tyr Ala Pro Gln Thr Tyr Ala Ala Ile Pro Ser Leu His Phe Pro Ala  
 35 40 45  
 Thr Lys Gly His Leu Ser Asn Arg Ala Ile Ile Arg Ala Pro Ser Val  
 50 55 60  
 Arg Glu Ile Tyr Met Asn Val Pro Val Gly Ala Ala Gly Val Arg Gly  
 65 70 75 80  
 Leu Gly Gly Arg Gly Tyr Leu Ala Tyr Thr Gly Leu Gly Arg Gly Tyr  
 85 90 95  
 Gln Val Lys Gly Asp Lys Arg Glu Asp Lys Leu Tyr Asp Ile Leu Pro  
 100 105 110  
 Gly Met Glu Leu Thr Pro Met Asn Pro Val Thr Leu Lys Pro Gln Gly  
 115 120 125  
 Ile Lys Leu Ala Pro Gln Ile Leu Glu Glu Ile Cys Gln Lys Asn Asn  
 130 135 140  
 Trp Gly Gln Pro Val Tyr Gln Leu His Ser Ala Ile Gly Gln Asp Gln  
 145 150 155 160  
 Arg Gln Leu Phe Leu Tyr Lys Ile Thr Ile Pro Ala Leu Ala Ser Gln  
 165 170 175  
 Asn Pro Ala Ile His Pro Phe Thr Pro Pro Lys Leu Ser Ala Phe Val  
 180 185 190  
 Asp Glu Ala Lys Thr Tyr Ala Ala Glu Tyr Thr Leu Gln Thr Leu Gly  
 195 200 205  
 Ile Pro Thr Asp Gly Gly Asp Gly Thr Met Ala Thr Ala Ala Ala Ala  
 210 215 220  
 Ala Thr Ala Phe Pro Gly Tyr Ala Val Pro Asn Ala Thr Ala Pro Val  
 225 230 235 240  
 Ser Ala Ala Gln Leu Lys Gln Ala Val Thr Leu Gly Gln Asp Leu Ala  
 245 250 255  
 Ala Tyr Thr Thr Tyr Glu Val Tyr Pro Thr Phe Ala Val Thr Ala Arg  
 260 265 270  
 Gly Asp Gly Tyr Gly Thr Phe

625                      630                      635                      640  
 Ile Ala Asn Gly His Arg Thr Ala Ser Asp Ala Gly Phe Pro Val Gly  
                                  645                      650                      655  
 Ser His Val Gln Tyr Arg Cys Leu Pro Gly Tyr Ser Leu Glu Gly Ala  
                                  660                      665                      670  
 Ala Met Leu Thr Cys Tyr Ser Arg Asp Thr Gly Thr Pro Lys Trp Ser  
                                  675                      680                      685  
 Asp Arg Val Pro Lys Cys Ala Leu Lys Tyr Glu Pro Cys Leu Asn Pro  
                                  690                      695                      700  
 Gly Val Pro Glu Asn Gly Tyr Gln Thr Leu Tyr Lys His His Tyr Gln  
 705                                   710                      715                      720  
 Ala Gly Glu Ser Leu Arg Phe Phe Cys Tyr Glu Gly Phe Glu Leu Ile  
                                  725                      730                      735  
 Gly Glu Val Thr Ile Thr Cys Val Pro Gly His Pro Ser Gln Trp Thr  
                                  740                      745                      750  
 Ser Gln Pro Pro Leu Cys Lys Val Ala Tyr Glu Glu Leu Leu Asp Asn  
                                  755                      760                      765  
 Arg Lys Leu Glu Val Thr Gln Thr Thr Asp Pro Ser Arg Gln Leu Glu  
                                  770                      775                      780  
 Gly Gly Asn Leu Ala Leu Ala Ile Leu Leu Pro Leu Gly Leu Val Ile  
 785                                   790                      795                      800  
 Val Leu Gly Ser Gly Val Tyr Ile Tyr Tyr Thr Lys Leu Gln Gly Lys  
                                  805                      810                      815  
 Ser Leu Phe Gly Phe Ser Gly Ser His Ser Tyr Ser Pro Ile Thr Val  
                                  820                      825                      830  
 Glu Ser Asp Phe Ser Asn Pro Leu Tyr Glu Ala Gly Asp Thr Arg Glu  
                                  835                      840                      845  
 Tyr Glu Val Ser Ile  
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&lt;210&gt; 5267

&lt;211&gt; 885

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5267

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 180  
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 360  
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 420  
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 540

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Phe Arg Ile His Tyr Gln Ala Tyr Leu Leu Ser Cys Gly Phe Pro Pro
  210      215      220
Arg Pro Ala His Gly Asp Val Ser Val Thr Asp Leu His Pro Gly Gly
225      230      235      240
Thr Ala Thr Phe His Cys Asp Ser Gly Tyr Gln Leu Gln Gly Glu Glu
      245      250      255
Thr Leu Ile Cys Leu Asn Gly Thr Arg Pro Ser Trp Asn Gly Glu Thr
      260      265      270
Pro Ser Cys Met Ala Ser Cys Gly Gly Thr Ile His Asn Ala Thr Leu
      275      280      285
Gly Arg Ile Val Ser Pro Glu Pro Gly Gly Ala Val Gly Pro Asn Leu
      290      295      300
Thr Cys Arg Trp Val Ile Glu Ala Ala Glu Gly Arg Arg Leu His Leu
305      310      315      320
His Phe Glu Arg Val Ser Leu Asp Glu Asp Asn Asp Arg Leu Met Val
      325      330      335
Arg Ser Gly Gly Ser Pro Leu Ser Pro Val Ile Tyr Asp Ser Asp Met
      340      345      350
Asp Asp Val Pro Glu Arg Gly Leu Ile Ser Asp Ala Gln Ser Leu Tyr
      355      360      365
Val Glu Leu Leu Ser Glu Thr Pro Ala Asn Pro Leu Leu Leu Ser Leu
      370      375      380
Arg Phe Glu Ala Phe Glu Glu Asp Arg Cys Phe Ala Pro Phe Leu Ala
385      390      395      400
His Gly Asn Val Thr Thr Thr Asp Pro Glu Tyr Arg Pro Gly Ala Leu
      405      410      415
Ala Thr Phe Ser Cys Leu Pro Gly Tyr Ala Leu Glu Pro Pro Gly Pro
      420      425      430
Pro Asn Ala Ile Glu Cys Val Asp Pro Thr Glu Pro His Trp Asn Asp
      435      440      445
Thr Glu Pro Ala Cys Lys Ala Met Cys Gly Gly Glu Leu Ser Glu Pro
      450      455      460
Ala Gly Val Val Leu Ser Pro Asp Trp Pro Gln Ser Tyr Ser Pro Gly
465      470      475      480
Gln Asp Cys Val Trp Gly Val His Val Gln Glu Glu Lys Arg Ile Leu
      485      490      495
Leu Gln Val Glu Ile Leu Asn Val Arg Glu Gly Asp Met Leu Thr Leu
      500      505      510
Phe Asp Gly Asp Gly Pro Ser Ala Arg Val Leu Ala Gln Leu Arg Gly
      515      520      525
Pro Gln Pro Arg Arg Arg Leu Leu Ser Ser Gly Pro Asp Leu Thr Leu
      530      535      540
Gln Phe Gln Ala Pro Pro Gly Pro Pro Asn Pro Gly Leu Gly Gln Gly
545      550      555      560
Phe Val Leu His Phe Lys Glu Val Pro Arg Asn Asp Thr Cys Pro Glu
      565      570      575
Leu Pro Pro Pro Glu Trp Gly Trp Arg Thr Ala Ser His Gly Asp Leu
      580      585      590
Ile Arg Gly Thr Val Leu Thr Tyr Gln Cys Glu Pro Gly Tyr Glu Leu
      595      600      605
Leu Gly Ser Asp Ile Leu Thr Cys Gln Trp Asp Leu Ser Trp Ser Ala
      610      615      620
Ala Pro Pro Ala Cys Gln Lys Ile Met Thr Cys Ala Asp Pro Gly Glu

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&lt;210&gt; 5266

&lt;211&gt; 853

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5266

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 Glu Glu Ile Leu Pro Glu Pro Gly Ser Glu Thr Pro Thr Val Ala Ser  
 35 40 45  
 Glu Ala Leu Ala Glu Leu Leu His Gly Ala Leu Leu Arg Arg Gly Pro  
 50 55 60  
 Glu Met Gly Tyr Leu Pro Gly Pro Pro Leu Gly Pro Glu Gly Gly Glu  
 65 70 75 80  
 Glu Glu Thr Thr Thr Thr Ile Ile Thr Thr Thr Thr Val Thr Thr Thr  
 85 90 95  
 Val Thr Ser Pro Val Leu Cys Asn Asn Asn Ile Ser Glu Gly Glu Gly  
 100 105 110  
 Tyr Val Glu Ser Pro Asp Leu Gly Ser Pro Val Ser Arg Thr Leu Gly  
 115 120 125  
 Leu Leu Asp Cys Thr Tyr Ser Ile His Val Tyr Pro Gly Tyr Gly Ile  
 130 135 140  
 Glu Ile Gln Val Gln Thr Leu Asn Leu Ser Gln Glu Glu Glu Leu Leu  
 145 150 155 160  
 Val Leu Ala Gly Gly Gly Ser Pro Gly Leu Ala Pro Arg Leu Leu Ala  
 165 170 175  
 Asn Ser Ser Met Leu Gly Glu Gly Gln Val Leu Arg Ser Pro Thr Asn  
 180 185 190  
 Arg Leu Leu Leu His Phe Gln Ser Pro Arg Val Pro Arg Gly Gly Gly

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2580

Met Asp Leu Ile Asn Arg Ala Thr Met Ser Glu Trp Lys Leu Gln Ser  
 1 5 10 15  
 Lys Ile Gln Ile Ser His Ser Trp Glu Glu Gly Leu Lys Leu Val Lys  
 20 25 30  
 Trp His Phe Asn Ile Asn Gln Lys Arg Phe Ser Lys Ala Gln Pro Thr  
 35 40 45  
 Cys Phe Leu Leu Ile Leu Pro Pro Cys Gln Lys Ile Met Cys Ile Tyr  
 50 55 60  
 Phe Gln Leu Leu Leu Met Glu Thr Thr Ala Met Leu Asp Leu Leu Val  
 65 70 75 80  
 Ile Arg Gln Leu Lys Ser Ala Leu Ser Gln Thr Leu Leu Cys His Leu  
 85 90 95  
 Leu Ile Leu Val Leu Ile Cys Ser Arg  
 100 105

&lt;210&gt; 5265

&lt;211&gt; 3203

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5265

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 960

Ile Gly Met Asp Pro Ser Asp Ile Tyr Ala Val Ile Gln Ile Pro Gly  
 70 75 80  
 Ser Arg Glu Phe Asp Val Ser Phe Arg Ser Ala Glu Lys Leu Ala Leu  
 85 90 95  
 Phe Leu Arg Val Tyr Glu Glu Lys Arg Glu Gln Glu Asp Cys Trp Glu  
 100 105 110  
 Asn Phe Val Val Leu Gly Arg Ser Lys Ser Ser Leu Lys Thr Leu Phe  
 115 120 125  
 Ile Leu Phe Arg Asn Glu Thr Val Asp Val Glu Asp Ile Val Thr Trp  
 130 135 140  
 Leu Lys Arg His Cys Asp Val Leu Ala Val Pro Val Lys Val Thr Asp  
 145 150 155 160  
 Arg Phe Gly Ile Trp Thr Gly Glu Tyr Lys Cys Glu Ile Glu Leu Arg  
 165 170 175  
 Gln Gly Glu Gly Gly Val Arg His Leu Pro Gly Ala Phe Phe Leu Gly  
 180 185 190  
 Ala Glu Arg Gly Tyr Ser Trp Tyr Lys Gly Gln Pro Lys Thr Cys Phe  
 195 200 205  
 Lys Cys Gly Ser Arg Thr His Met Ser Gly Ser Cys Thr Gln Asp Arg  
 210 215 220  
 Cys Phe Arg Cys Gly Glu Glu Gly His Leu Ser Pro Tyr Cys Arg Lys  
 225 230 235 240  
 Gly Ile Val Cys Asn Leu Cys Gly Lys Arg Gly His Ala Phe Ala Gln  
 245 250 255  
 Cys Pro Lys Ala Val His Asn Ser Val Ala Ala Gln Leu Thr Gly Val  
 260 265 270  
 Ala Gly His  
 275

&lt;210&gt; 5263

&lt;211&gt; 319

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5263

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 120

gaagtagata cacattatct tctgacaggg gggaagtatc agaagaaagc atgttggttg  
 180

tgccttgga aatctttttt ggttgatatt gaaatgccat ttcaccagtt tcaagccttc  
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 300

atttattaaa tccatggct  
 319

&lt;210&gt; 5264

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5264

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 1380  
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 1980  
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 2160  
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 2340  
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 2394

&lt;210&gt; 5262

&lt;211&gt; 275

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5262

Xaa	Ala	Ala	Met	Ala	Thr	Pro	Ala	Arg	Pro	Gly	Glu	Ala	Glu	Asp	Ala
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Ala	Glu	Arg	Pro	Leu	Gln	Asp	Glu	Pro	Ala	Ala	Ala	Ala	Ala	Gly	Pro
		20					25				30				
Gly	Lys	Gly	Arg	Phe	Leu	Val	Arg	Ile	Cys	Phe	Gln	Gly	Asp	Glu	Gly
	35					40					45				
Ala	Cys	Pro	Thr	Arg	Asp	Phe	Val	Val	Gly	Ala	Leu	Ile	Leu	Arg	Ser
	50					55					60				

50                      55                      60  
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<210> 5261

<211> 2394

<212> DNA

<213> Homo sapiens

<400> 5261

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 960  
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 1260

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      210              215              220
Lys Leu Ser Asp Arg Leu Lys Ser Leu Gly Ala Glu His Val Ile Thr
225              230              235              240
Glu Glu Glu Leu Arg Arg Pro Glu Met Lys Asn Phe Phe Lys Asp Met
      245              250              255
Pro Gln Pro Arg Leu Ala Leu Asn Cys Val Gly Gly Lys Ser Ser Thr
      260              265              270
Glu Leu Leu Arg Gln Leu Ala Arg Gly Gly Thr Met Val Thr Tyr Gly
      275              280              285
Gly Met Ala Lys Gln Pro Val Val Ala Ser Val Ser Leu Leu Ile Phe
      290              295              300
Lys Asp Leu Lys Leu Arg Gly Phe Trp Leu Ser Gln Trp Lys Lys Asp
305              310              315              320
His Ser Pro Asp Gln Phe Lys Glu Leu Ile Leu Thr Leu Cys Asp Leu
      325              330              335
Ile Arg Arg Gly Gln Leu Thr Ala Pro Ala Cys Ser Gln Val Pro Leu
      340              345              350
Gln Asp Tyr Gln Ser Ala Leu Glu Ala Ser Met Lys Pro Phe Ile Ser
      355              360              365
Ser Lys Gln Ile Leu Thr Met
      370              375

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&lt;210&gt; 5259

&lt;211&gt; 306

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5259

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180
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240
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300
agttta
306

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&lt;210&gt; 5260

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5260

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Met Thr Glu Glu Lys Thr Leu Thr Ala Glu Gly Leu Val Lys Leu Leu
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Gln Ala Val Lys Thr Thr Phe Pro Asn Leu Gly Leu Leu Leu Glu Lys
      20              25              30
Leu Gln Lys Ser Ala Thr Leu Pro Ser Thr Thr Val Gln Pro Ser Pro
      35              40              45
Asp Asp Tyr Gly Thr Glu Leu Leu Arg Arg Tyr His Glu Asn Leu Ser

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 1320  
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 1366

&lt;210&gt; 5258

&lt;211&gt; 375

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5258

Met	Trp	Val	Cys	Ser	Thr	Leu	Trp	Arg	Val	Arg	Thr	Pro	Pro	Gly	Ser
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Gly	Gly	Gly	Leu	Leu	Pro	Ala	Ser	Gly	Cys	His	Gly	Pro	Ala	Ala	Ser
			20					25					30		
Ser	Tyr	Ser	Ala	Ser	Ala	Glu	Pro	Ala	Arg	Val	Arg	Gly	Leu	Val	Tyr
		35				40						45			
Gly	His	His	Gly	Asp	Pro	Ala	Lys	Val	Val	Glu	Leu	Lys	Asn	Leu	Glu
	50				55					60					
Leu	Ala	Ala	Val	Arg	Gly	Ser	Asp	Val	Arg	Val	Lys	Met	Leu	Ala	Ala
65				70					75					80	
Pro	Ile	Asn	Pro	Ser	Asp	Ile	Asn	Met	Ile	Gln	Gly	Asn	Tyr	Gly	Leu
			85					90						95	
Leu	Pro	Glu	Leu	Pro	Ala	Val	Gly	Gly	Asn	Glu	Gly	Val	Ala	Gln	Val
			100					105					110		
Val	Ala	Val	Gly	Ser	Asn	Val	Thr	Gly	Leu	Lys	Pro	Gly	Asp	Trp	Val
		115				120						125			
Ile	Pro	Ala	Asn	Ala	Gly	Leu	Asp	Ser	Gly	Thr	Trp	Arg	Thr	Glu	Ala
	130				135						140				
Val	Phe	Ser	Glu	Glu	Ala	Leu	Ile	Gln	Val	Pro	Ser	Asp	Ile	Pro	Leu
145				150					155					160	
Gln	Ser	Ala	Ala	Thr	Leu	Gly	Val	Asn	Pro	Cys	Thr	Ala	Tyr	Arg	Met
			165					170						175	
Leu	Met	Asp	Phe	Glu	Gln	Leu	Gln	Pro	Gly	Asp	Ser	Val	Ile	Gln	Asn
			180					185					190		
Ala	Ser	Asn	Ser	Gly	Val	Gly	Gln	Ala	Val	Ile	Gln	Ile	Ala	Ala	Ala
		195				200						205			
Leu	Gly	Leu	Arg	Thr	Ile	Asn	Val	Val	Arg	Asp	Arg	Pro	Asp	Ile	Gln

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1410

<210> 5256

<211> 95

<212> PRT

<213> Homo sapiens

<400> 5256

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Leu	His	Gly	Cys	Trp	Ile	Pro	Pro	His	Pro	Thr	Ser	Ala	Trp	Pro	Pro
		20					25					30			
Pro	Pro	Ser	Pro	Val	Gly	Lys	Leu	Phe	Pro	Gly	Thr	Thr	Pro	Leu	Pro
		35				40					45				
Ala	Ser	Pro	His	Phe	Thr	Ala	Ser	Ser	Ile	Pro	Leu	Pro	Pro	Ser	Arg
	50					55				60					
Arg	Ile	Val	Pro	Arg	Ala	Val	Phe	Leu	Gln	Gly	Val	Arg	Gly	Ile	Thr
65				70					75					80	
His	Ser	Trp	Arg	Leu	Ala	Arg	Arg	Gln	Ser	Glu	Ala	Arg	Asp	Thr	
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<210> 5257

<211> 1366

<212> DNA

<213> Homo sapiens

<400> 5257

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180  
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240  
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600  
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780

50

55

&lt;210&gt; 5255

&lt;211&gt; 1410

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5255

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<210> 5253  
 <211> 898  
 <212> DNA  
 <213> Homo sapiens

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 720  
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 780  
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<210> 5254  
 <211> 56  
 <212> PRT  
 <213> Homo sapiens

<400> 5254  
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 20 25 30  
 Leu Cys Gln Gly Pro Glu Pro Val Arg Gly Arg Pro Ala Pro Pro Gly  
 35 40 45  
 Ser His Arg Gly Pro Pro His Ser

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      115      120      125
Cys Tyr Val Thr Phe Ile Cys Asn Ile Phe Asp Tyr Leu Arg Val Asn
      130      135      140
Asn Met Pro Met Met Ala Leu Val Asn Pro Val Tyr Asp Cys Leu Phe
145      150      155      160
Arg Leu Ala Gln Pro Asp Ser Leu Ser Lys Glu Glu Glu Val Asp Cys
      165      170      175
Leu Val Leu Gln Leu His Arg Val Gly Glu Gln Leu Glu Lys Met Asn
      180      185      190
Gly Gln Arg Met Asp Glu Leu Phe Val Leu Ile Arg Asp Gly Phe Leu
      195      200      205
Leu Pro Thr Gly Leu Ser Ser Leu Ala
      210      215

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&lt;210&gt; 5251

&lt;211&gt; 372

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5251

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372

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&lt;210&gt; 5252

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5252

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Asn Gly Tyr Ala His Pro Ser Gly Thr Ala Leu His Tyr Asp Asp Val
      20      25      30
Pro Cys Ile Asn Gly Ser Gly Glu Pro Glu Asp Gly Phe Pro Ala Phe
      35      40      45
Cys Ser Arg Ser Leu Gly Glu Glu Gly Ala Phe Glu Asn Pro Gly Leu
      50      55      60
Tyr Asp Asn Trp Pro Pro Pro His Ile Phe Ala Arg Tyr Ser Pro Ala
      65      70      75      80
Asp Arg Lys Ala Ser Arg Leu Ser Ala Asp Lys Leu Ser Ser Asn His
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Tyr Lys Tyr Pro Ala Ser Ala Gln Ser Val Thr Asn Thr Ser Ser Val

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 <210> 5249  
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 <212> DNA  
 <213> Homo sapiens  
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<210> 5250  
 <211> 217  
 <212> PRT  
 <213> Homo sapiens

<400> 5250  
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 35 40 45  
 Lys Thr Ala Leu Lys Asp Pro Gly Ala Val Asp Leu Glu Lys Val Ala  
 50 55 60  
 Asn Val Ile Val Asp His Ser Leu Gln Asp Cys Val Phe Ser Lys Glu  
 65 70 75 80  
 Ala Gly Arg Met Cys Tyr Ala Ile Ile Gln Ala Glu Ser Lys Gln Ala  
 85 90 95  
 Gly Gln Ser Val Phe Arg Arg Gly Leu Leu Asn Arg Leu Gln Gln Glu  
 100 105 110  
 Tyr Gln Ala Arg Glu Gln Leu Arg Ala Arg Ser Leu Gln Gly Trp Val

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360  
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&lt;210&gt; 5248

&lt;211&gt; 185

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5248

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			20					25					30		
Ser	Pro	Thr	Gln	Gly	Val	Arg	Ile	Leu	Glu	Phe	Glu	Asn	Pro	His	Val
		35					40					45			
Thr	Ser	Asn	Asn	Lys	Gly	Thr	Gly	Cys	Glu	Phe	Glu	Leu	Trp	Asp	Cys
	50					55					60				
Gly	Gly	Asp	Ala	Lys	Phe	Glu	Ser	Cys	Trp	Pro	Ala	Leu	Met	Lys	Asp
65					70					75				80	
Ala	His	Gly	Val	Val	Ile	Val	Phe	Asn	Ala	Asp	Ile	Pro	Ser	His	Arg
			85					90						95	
Lys	Glu	Met	Glu	Met	Trp	Tyr	Ser	Cys	Phe	Val	Gln	Gln	Pro	Ser	Leu
		100						105					110		
Gln	Asp	Thr	Gln	Cys	Met	Leu	Ile	Ala	His	His	Lys	Pro	Gly	Ser	Gly
		115					120					125			
Asp	Asp	Lys	Gly	Ser	Leu	Ser	Leu	Ser	Pro	Pro	Leu	Asn	Lys	Leu	Lys
	130					135					140				
Leu	Val	His	Ser	Asn	Leu	Glu	Asp	Asp	Pro	Glu	Glu	Ile	Arg	Met	Glu
145				150					155					160	
Phe	Ile	Lys	Tyr	Leu	Lys	Ser	Ile	Ile	Asn	Ser	Met	Ser	Glu	Ser	Arg

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<210> 5246

<211> 131

<212> PRT

<213> Homo sapiens

<400> 5246

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Thr	Val	Leu	Ala	Asn	Phe	Leu	Thr	Glu	Ser	Ser	Asp	Ile	Thr	Glu	Tyr
		20						25				30			
Ser	Pro	Thr	Gln	Gly	Val	Arg	Phe	Glu	Ser	Cys	Trp	Pro	Ala	Leu	Met
		35				40					45				
Lys	Asp	Ala	His	Gly	Val	Val	Ile	Val	Phe	Asn	Ala	Asp	Ile	Pro	Ser
	50				55				60						
His	Arg	Lys	Glu	Met	Glu	Met	Trp	Tyr	Ser	Cys	Phe	Val	Gln	Gln	Pro
65				70					75				80		
Ser	Leu	Gln	Asp	Thr	Gln	Cys	Met	Leu	Ile	Ala	His	His	Lys	Pro	Gly
		85						90					95		
Ser	Gly	Asp	Asp	Lys	Gly	Ser	Leu	Ser	Leu	Ser	Pro	Pro	Leu	Asn	Lys
	100						105				110				
Leu	Lys	Leu	Val	His	Ser	Asn	Leu	Glu	Asp	Asp	Pro	Glu	Glu	Ile	Arg
	115					120					125				
Met	Glu	Phe													
	130														

<210> 5247

<211> 1004

<212> DNA

<213> Homo sapiens

<400> 5247

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145

&lt;210&gt; 5243

&lt;211&gt; 344

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5243

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 240  
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 344

&lt;210&gt; 5244

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5244

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 Lys Asn Gln Thr Trp Leu Asp Leu Thr Asp Glu Pro Phe Gly Gln Lys  
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 Val Thr Val Asp Pro Asp Asn Ser Asn Cys Ser Glu Glu Ser Ala Arg  
 35 40 45  
 Leu Ser Leu Lys Leu Gly Asp Ala Gly Asn Pro Arg Ser Leu Ala Ile  
 50 55 60  
 Arg Phe Ile Leu Thr Asn Tyr Asn Lys Leu Ser Ile Gln Ser Trp Phe  
 65 70 75 80  
 Ser Leu Arg Arg Val Glu Ile Ile Ser Asn Ser Ile Gln Ala Val  
 85 90 95  
 Phe Asn Pro Thr Gly Val Tyr Ala Pro Ser Gly Tyr Ser Tyr Arg Cys  
 100 105 110  
 Gln Arg

&lt;210&gt; 5245

&lt;211&gt; 483

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5245

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 Pro Ala  
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<210> 5241  
 <211> 461  
 <212> DNA  
 <213> Homo sapiens

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<210> 5242  
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 <212> PRT  
 <213> Homo sapiens

<400> 5242  
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 20                      25                      30  
 Glu Pro Gln Ala Asp Pro Glu Pro Ser Ser Ser Pro Ser Arg Ala Val  
 35                      40                      45  
 Cys Thr Ala Pro Gly Ile Gly Thr Pro Cys Ser Gly Cys Ala Gly Thr  
 50                      55                      60  
 Ala Ala Pro Arg Glu Val Arg Gly Leu Leu Ser His Leu Pro Pro Ser  
 65                      70                      75                      80  
 Val Val Ser Trp Arg Phe Gln Trp Phe Gly Ala Ser Leu Leu Thr Trp  
 85                      90                      95  
 Pro Ala Leu Ser Ser Ala Ser Arg Leu Trp Gly Pro Leu His Pro Gly  
 100                      105                      110  
 Gly Arg Arg Arg Lys Lys Pro Pro Glu Val Ala Arg Asn Pro Val  
 115                      120                      125  
 Ala Gly Glu Val Gly Leu Ser Gln Ala Arg Pro Leu Cys Arg Glu Phe  
 130                      135                      140  
 Pro Arg

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&lt;210&gt; 5240

&lt;211&gt; 226

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5240

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 Ser Pro Ser Trp Leu Val Ser Val Leu Pro Thr Ser Leu Leu Ser Leu  
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 Ser Ala Gly Gly Thr Pro Ser Gly Cys Thr Val Ala Gly Gly Leu Gly  
 35 40 45  
 Ala Ser Gly Gly Val Gly Ser Thr Gly Thr Gly Ala Ser Pro Pro Thr  
 50 55 60  
 Thr Val Ala Ile Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser  
 65 70 75 80  
 Ser Ser Glu Ser Val Ser Leu Gly Gly Ala Trp Gly Gly Pro Gly Gly  
 85 90 95  
 Gly Ser Leu Ser Pro Arg Ser Ala Phe Phe Asn Phe Arg Phe Leu Leu  
 100 105 110  
 Phe Leu Ile Arg Asp Leu Phe Ser Pro Ser Pro Gly Val Gly Arg Gly  
 115 120 125  
 Leu Arg Ser Thr Pro Lys Pro Ala Pro Ala Pro Gly Pro Asn Phe Arg  
 130 135 140  
 Phe Phe Arg Ser Phe Phe Arg Gly Gly Trp Glu Arg Ser Pro Trp Glu  
 145 150 155 160  
 Arg Gly Thr Gly Val Arg Ala Ala Gly Gly Arg Glu Val Cys Val Arg  
 165 170 175  
 Asp Val Gly Asp Lys Gly Asp Ala Thr Leu Gly Pro Ser Arg Ser Lys  
 180 185 190  
 Arg Glu Ser Leu Ser Phe Ile Phe Ser Ser Lys Val Ala Leu Ser Gly

&lt;210&gt; 5239

&lt;211&gt; 2061

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5239

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1080  
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1140  
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1200  
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1260  
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1440

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 780  
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 1020  
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 1080  
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<211> 212

<212> PRT

<213> Homo sapiens

<400> 5238

Phe	Phe	Phe	Leu	Pro	Ser	Ser	Ile	Ser	Phe	Phe	Phe	Thr	Ile	Ser	Phe
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Pro	Lys	Ala	Ala	Pro	Tyr	Ser	Val	Gly	Ile	Ala	Asn	Val	Asp	Val	Leu
			20					25					30		
Leu	Leu	Gly	Ile	Tyr	Ile	Ile	His	Arg	Ala	Val	Arg	Asn	Pro	Asp	Asp
		35					40					45			
Leu	Glu	Ala	Arg	Ser	His	Met	His	Leu	Ala	Ser	Ala	Phe	Ala	Gly	Ile
		50				55					60				
Gly	Phe	Gly	Asn	Ala	Gly	Val	His	Leu	Cys	His	Gly	Met	Ser	Tyr	Pro
65				70					75					80	
Ile	Ser	Gly	Leu	Val	Lys	Met	Tyr	Lys	Ala	Lys	Asp	Tyr	Asn	Val	Asp
			85						90					95	
His	Pro	Leu	Val	Pro	His	Gly	Leu	Ser	Val	Val	Leu	Thr	Ser	Pro	Ala
			100					105					110		
Val	Phe	Thr	Phe	Thr	Ala	Gln	Met	Phe	Pro	Glu	Arg	His	Leu	Glu	Met
		115				120						125			
Ala	Glu	Ile	Leu	Gly	Ala	Asp	Thr	Arg	Thr	Ala	Arg	Ile	Gln	Asp	Ala
		130				135					140				
Gly	Leu	Val	Leu	Ala	Asp	Thr	Leu	Arg	Lys	Phe	Leu	Phe	Asp	Leu	Asp
145				150					155					160	
Val	Asp	Asp	Gly	Leu	Ala	Ala	Val	Gly	Tyr	Ser	Lys	Ala	Asp	Ile	Pro
			165					170						175	
Ala	Leu	Val	Lys	Gly	Thr	Leu	Pro	Gln	Glu	Arg	Val	Thr	Lys	Leu	Ala
		180						185					190		
Pro	Arg	Pro	Gln	Ser	Glu	Glu	Asp	Leu	Ala	Ala	Leu	Phe	Glu	Ala	Ser
		195					200						205		
Met	Lys	Leu	Tyr												
			210												

1	5	10	15
Gly Lys Ile Tyr Tyr His Val Ile Thr Arg Gln Thr Gln Trp Asp			
20	25	30	
Pro Pro Thr Trp Glu Ser Pro Gly Asp Asp Ala Ser Leu Glu His Glu			
35	40	45	
Ala Glu Met Asp Leu Gly Thr Pro Thr Tyr Asp Glu Asn Pro Met Lys			
50	55	60	
Ala Ser Lys Lys Pro Lys Thr Ala Glu Ala Asp Thr Ser Ser Glu Leu			
65	70	75	80
Ala Lys Lys Ser Lys Glu Val Phe Arg Lys Glu Met Ser Gln Phe Ile			
85	90	95	
Val Gln Cys Leu Asn Pro Tyr Arg Lys Pro Asp Cys Lys Val Gly Arg			
100	105	110	
Ile Thr Thr Thr Glu Asp Phe Lys His Leu Ala Arg Lys Leu Thr His			
115	120	125	
Gly Val Met Asn Lys Glu Leu Lys Tyr Cys Lys Asn Pro Glu Asp Leu			
130	135	140	
Glu Cys Asn Glu Asn Val Lys His Lys Thr Lys Glu Tyr Ile Lys Lys			
145	150	155	160
Tyr Met Gln Lys Phe Gly Ala Val Tyr Lys Pro Lys Glu Asp Thr Glu			
165	170	175	
Leu Glu			

&lt;210&gt; 5237

&lt;211&gt; 1238

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5237

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 180  
 cttgaagcaa ggtctcatat gcacttggca agtgcttttg ctggcatcgg ctttggaat  
 240  
 gctggtgttc atctgtgcca tggaatgtct tacccaattt caggtttagt gaagatgtat  
 300  
 aaagcaaagg attacaatgt ggatcaccca ctggtgcccc atggcctttc tgtggtgctc  
 360  
 acgtccccag cggtgttcac tttcacggcc cagatgtttc cagagcgaca cctggagatg  
 420  
 gcagaaatac tgggagccga caccgcact gccaggatcc aagatgcagg gctggtgttg  
 480  
 gcagacacgc tccggaaatt cttattcgat ctggatgttg atgatggcct agcagctgtt  
 540  
 ggttactcca aagctgatat cccgcacta gtgaaaggaa cgctgccccca ggaaagggtc  
 600  
 accaagcttg caccctgtcc ccagtcagaa gaggatctgg ctgctctgtt tgaagcttca  
 660  
 atgaaactgt attaattgtc attttaactg aaagaattac cgctggccat tgtagtgtg  
 720

ccagccgcag cagtgactac aatagttgca ccagggcagc ctcagccctt gcagccatct  
 1740  
 gaaatgggtt tgacaaataa tctcttggtat ctgccgcccc cctctcctcc caaaccaaaa  
 1800  
 accattgtct tacctcccaa ctggaagaca gctcgagatc cagaaggga gatttattac  
 1860  
 taccatgtga tcacaaggca gactcagtgg gatcctccta cttgggaaag cccaggagat  
 1920  
 gatgccagcc ttgagcatga agctgagatg gacctgggaa ctccaacata tgatgaaaac  
 1980  
 cccatgaagg cctcgaaaaa gcccagaca gcagaagcag acacctccag tgaactagca  
 2040  
 aagaaaagca aagaagtatt cagaaaagag atgtccagc tcatcgcca gtgctgaac  
 2100  
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 2160  
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 2280  
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 2340  
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 2400  
 ggccctttctg tcccaccctc gtcagcactg tgctactgat gatacatcac cctggggaat  
 2460  
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 2520  
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 2580  
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 2640  
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 2700  
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 2820  
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 2880  
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 3017

&lt;210&gt; 5236

&lt;211&gt; 178

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5236

Lys Thr Ile Val Leu Pro Pro Asn Trp Lys Thr Ala Arg Asp Pro Glu

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120  
tctcagacta agactgctgt cctccgttg agtgaaggag atgggtattc tagtgagaat  
180  
acatcgctg ctcatacacc actcaacaca cctgacctt ccaccaagct gagcacagaa  
240  
gctgacacag aactcccaa gaaactaatg ttctgcagac tgaaaattat aagtgaaaat  
300  
agcatggaca gtgcaatctc tgatgcaacc agtgagctag aaggcaagga tggcaaagag  
360  
gatcttgatc aattagaaaa tgtccctgta gaggaagagg aagaattgca gtcacaacag  
420  
ctactccac aacagctgcc tgaatgcaaa gttgatagtg aaaccaacat agaagctagt  
480  
aagctaccta catctgaacc agaagctgac gctgaaatag agcccaaaga gagcaacggc  
540  
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660  
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720  
aaaagtcaaa ctgaaaagga aaacacaaca actgaacgag gaagggatgc tgttggcttc  
780  
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1380  
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 2580  
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 2640  
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 2700  
 gggggacatt ccaatgactt actgctgcat gacaaagcac caaaacatag tggcttaaat  
 2760  
 agaaatatat tgtctctcat gaaaaaaaaa aaaaaaaaaa a  
 2801

&lt;210&gt; 5234

&lt;211&gt; 57

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5234

Leu Thr Pro Val Ile Ser Ala Leu Trp Glu Ala Lys Ala Gly Gly Ser  
 1 5 10 15  
 Leu Asp Thr Arg Ser Ser Arg Pro Val Trp Gln Arg Gly Glu Thr Thr  
 20 25 30  
 Ile Ile Ser Lys Glu Thr Pro Pro Pro Arg Leu Ile Phe Lys Lys  
 35 40 45  
 Leu Ala Val Pro Val Val Pro Ala Thr  
 50 55

&lt;210&gt; 5235

&lt;211&gt; 3017

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5235

nncggccggg aaagtaacca gaagcttcag gaagagatta taaagacttt ggaacacttg  
 60

caactgggag tggtattaga atgaaaagta attagttaga agggcatata tctcagtggc  
360  
atgagcattg tggaatatcc tttcctaggc acatttgtcc actaagggaa cagcctcaga  
420  
aactggtaca gcaatgggtg agatgagatc ctggagagag aacacagcca tcccctatag  
480  
aaaggcacag cttttgggct tctctggcct gaatgccttc tgggggtattt ccatatgcaa  
540  
cagcccagag tcatagcctt gggcaaccac acatagaggt ttccttctca cttcagacac  
600  
atacatcact ttcacaccac ttggggatgg aaatacctac aagagtgaag gtcaagggcc  
660  
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720  
ccagctatgc gcctcatcct cattgcttct gcctccacgt aaatgaaacc aaaggcctca  
780  
gcatatcctg ggaggactgg gggctgttac ctaatgggcc tctctgtccc attataggtg  
840  
caaggcaccc catccacaca tttgcaccac tactccaaga tagtattttt cttttcacac  
900  
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960  
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1020  
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1080  
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1140  
cttcacttct ctgattggct tocaaccact gggattcaaa gagaatccaa gggtctgcct  
1200  
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1260  
ctcctcattc agacatcctc caccatacca gtgtttagaa gcaaaacatg aagggttagc  
1320  
gccaccagga tagtttagcag aaatattgtc tgtaaagcta ggcagatgag ccagagaagaa  
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1740  
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1800  
caacctgtc ttatttaact tgggggaagg ggattctcca atgtcttttc caggataaag  
1860  
aaggaaatta aaataccatg aaaaaatgga catggcagta gaaaggaaac attctgatca  
1920

ctcaaggaag agaaacgaaa caagagcaaa aagaaataat aaataataaa ttttaaaaaa  
 840  
 cttaa  
 845

<210> 5232  
 <211> 201  
 <212> PRT  
 <213> Homo sapiens

<400> 5232  
 Met Thr Leu Arg Pro Ser Leu Leu Pro Leu His Leu Leu Leu Leu Leu  
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 20 25 30  
 Ser Pro Val Arg Thr Leu Gln Val Glu Thr Leu Val Glu Pro Pro Glu  
 35 40 45  
 Pro Cys Ala Glu Pro Ala Ala Phe Gly Asp Thr Leu His Ile His Tyr  
 50 55 60  
 Thr Gly Ser Leu Val Asp Gly Arg Ile Ile Asp Thr Ser Leu Thr Arg  
 65 70 75 80  
 Asp Pro Leu Val Ile Glu Leu Gly Gln Lys Gln Val Ile Pro Gly Leu  
 85 90 95  
 Glu Gln Ser Leu Leu Asp Met Cys Val Gly Glu Lys Arg Arg Ala Ile  
 100 105 110  
 Ile Pro Ser His Leu Ala Tyr Gly Lys Arg Gly Phe Pro Pro Ser Val  
 115 120 125  
 Pro Ala Asp Ala Val Val Gln Tyr Asp Val Glu Leu Ile Ala Leu Ile  
 130 135 140  
 Arg Ala Asn Tyr Trp Leu Lys Leu Val Lys Gly Ile Leu Pro Leu Val  
 145 150 155 160  
 Gly Met Ala Met Val Pro Ala Leu Leu Gly Leu Ile Gly Tyr His Leu  
 165 170 175  
 Tyr Arg Lys Ala Asn Arg Pro Lys Val Ser Lys Lys Lys Leu Lys Glu  
 180 185 190  
 Glu Lys Arg Asn Lys Ser Lys Lys Lys  
 195 200

<210> 5233  
 <211> 2801  
 <212> DNA  
 <213> Homo sapiens

<400> 5233  
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 120  
 ctgttccttg gaaaaaatct aatgcaagga gggctagttc acagcaaatt cactgcctcc  
 180  
 tcccatgcac gtggtagaga gtaccagtat caacatggcc ctgttttctg ctaaaaccag  
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<210> 5230  
 <211> 102  
 <212> PRT  
 <213> Homo sapiens

<400> 5230  
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 20 25 30  
 Leu Val Leu Cys Gly Leu Arg Val Lys Lys Lys Arg Val Thr Arg Ser  
 35 40 45  
 Glu Lys Asn Glu Glu Glu Lys Gln Leu His Arg Lys Arg Ala Val Ser  
 50 55 60  
 Gln Val Pro Pro Thr Val Leu Cys Arg Glu Pro Val Gly Glu Ala Lys  
 65 70 75 80  
 Trp Gly Glu Trp Gly Thr Ser Gly Gly Arg Pro Gln Gly Thr Ser Trp  
 85 90 95  
 Cys Gln Arg Met Val Asp  
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<210> 5231  
 <211> 845  
 <212> DNA  
 <213> Homo sapiens

<400> 5231  
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 240  
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 420  
 gatggacgta ttattgacac ctccctgacc agagaccctc tggttataga acttggccaa  
 480  
 aagcaggtga ttccaggtct ggagcagagt cttctcgaca tgtgtgtggg agagaagcga  
 540  
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 600  
 gcggatgcag tgggtgcagta tgacgtggag ctgattgcac taatccgagc caactactgg  
 660  
 ctaaagctgg tgaaggcat tttgcctctg gtagggatgg ccatggtgcc agccctcctg  
 720  
 ggcttcattg ggtatcacct atacagaaag gccaatagac ccaaagtctc caaaaagaag  
 780

465                                      470                                      475                                      480  
 Val Val Asp Ala Gly Ile Thr Thr Lys Leu Leu Thr Asp Ser Asp Leu  
    485                                      490                                      495  
 Lys Lys Thr Val Asp Glu Ser Ala Arg Ile Gln Arg Ala Tyr Asn His  
    500                                      505                                      510  
 Tyr Phe Asp Leu Ile Ile Ile Asn Asp Asn Leu Asp Lys Ala Phe Glu  
    515                                      520                                      525  
 Lys Leu Gln Thr Ala Ile Glu Lys Leu Arg Met Glu Pro Gln Trp Val  
    530                                      535                                      540  
 Pro Ile Ser Trp Val Tyr  
 545                                      550

<210> 5229

<211> 1031

<212> DNA

<213> Homo sapiens

<400> 5229

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 120  
 tctcgcccac attttcccca agcactctca ggaacctggc aacagtgtcc ccttgtggcc  
 180  
 aagcctggaa catcacatct gtacgttgca atctgtggat cagctacgag actgagagaa  
 240  
 aggaatgaaa ggatggaaga attacaagat caggcactgc tgtctgtctg ttccacggat  
 300  
 gtaaccacag cacacgcgtg gctcacggta ctagtgtgat aaatgcttgt tacatgaagg  
 360  
 cgtgaacagg gatgagaaga gacttcctgg agaaacaaaa ggactaaca tcaggaaggg  
 420  
 gaggtgatcg gggcaggagt aaagtggaca cctcagcaaa gccattcgct gtgatctctg  
 480  
 attgtgcagt gtcattgctt gtcaccagag cccctcctgtg tttgatgttg gccaatgccg  
 540  
 ccagcatgat ctagcaggcc aaatcctaatt ctaccattct ctgacaccag ctggtccctc  
 600  
 ggggtcgtcc acccgatgtc cccattctc cccacttggc ctccccaca ggctctcggc  
 660  
 aaaggaccgt gggaggcacc tgtgacactg cccttttctt gtgcagctgt ttttcttctt  
 720  
 cattcttttc actcctcggt actctttttt ttttactct cagccacac aaaactagga  
 780  
 actttgttat tctacttatt tttctgtact ctgtctgttt gcacacagat ggatatctga  
 840  
 gagccagcga actttcttta cctcctagta tcatttcattg aaaattagta gcacctgcac  
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 960  
 aggctatgaa gactccctgc ccggtgcta tatgtctggt aaacagaata aatagtactt  
 1020  
 gagcatccct g  
 1031

35 40 45  
 Lys Ala Arg Glu Arg Leu Glu Asp Ser Lys Leu Glu Ala Val Ser Asp  
 50 55 60  
 Asn Asn Leu Glu Leu Val Asn Glu Ile Leu Glu Asp Ile Thr Pro Leu  
 65 70 75 80  
 Ile Asn Val Asp Glu Asn Val Ala Glu Leu Val Gly Ile Leu Lys Glu  
 85 90 95  
 Pro His Phe Gln Ser Leu Leu Glu Ala His Asp Ile Val Ala Ser Lys  
 100 105 110  
 Cys Tyr Asp Ser Pro Pro Ser Ser Pro Glu Met Asn Asn Ser Ser Ile  
 115 120 125  
 Asn Asn Gln Leu Leu Pro Val Asp Ala Ile Arg Ile Leu Gly Ile His  
 130 135 140  
 Lys Arg Ala Gly Glu Pro Leu Gly Val Thr Phe Arg Val Glu Asn Asn  
 145 150 155 160  
 Asp Leu Val Ile Ala Arg Ile Leu His Gly Gly Met Ile Asp Arg Gln  
 165 170 175  
 Gly Leu Leu His Val Gly Asp Ile Ile Lys Glu Val Asn Gly His Glu  
 180 185 190  
 Val Gly Asn Asn Pro Lys Glu Leu Gln Glu Leu Leu Lys Asn Ile Ser  
 195 200 205  
 Gly Ser Val Thr Leu Lys Ile Leu Pro Ser Tyr Arg Asp Thr Ile Thr  
 210 215 220  
 Pro Gln Gln Val Phe Val Lys Cys His Phe Asp Tyr Asn Pro Tyr Asn  
 225 230 235 240  
 Asp Asn Leu Ile Pro Cys Lys Glu Ala Gly Leu Lys Phe Ser Lys Gly  
 245 250 255  
 Glu Ile Leu Gln Ile Val Asn Arg Glu Asp Pro Asn Trp Trp Gln Ala  
 260 265 270  
 Ser His Val Lys Glu Gly Gly Ser Ala Gly Leu Ile Pro Ser Gln Phe  
 275 280 285  
 Leu Glu Glu Lys Arg Lys Ala Phe Val Arg Arg Asp Trp Asp Asn Ser  
 290 295 300  
 Gly Pro Phe Cys Gly Thr Ile Ser Ser Lys Lys Lys Lys Lys Met Met  
 305 310 315 320  
 Tyr Leu Thr Thr Arg Asn Ala Glu Phe Asp Arg His Glu Ile Gln Ile  
 325 330 335  
 Tyr Glu Glu Val Ala Lys Met Pro Pro Phe Gln Arg Lys Thr Leu Val  
 340 345 350  
 Leu Ile Gly Ala Gln Gly Val Gly Arg Arg Ser Leu Lys Asn Arg Phe  
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 Ile Val Leu Asn Pro Thr Arg Phe Gly Thr Thr Val Pro Phe Thr Ser  
 370 375 380  
 Arg Lys Pro Arg Glu Asp Glu Lys Asp Gly Gln Ala Tyr Lys Phe Val  
 385 390 395 400  
 Ser Arg Ser Glu Met Glu Ala Asp Ile Lys Ala Gly Lys Tyr Leu Glu  
 405 410 415  
 His Gly Glu Tyr Glu Gly Asn Leu Tyr Gly Thr Lys Ile Asp Ser Ile  
 420 425 430  
 Leu Glu Val Val Gln Thr Gly Arg Thr Cys Ile Leu Asp Val Asn Pro  
 435 440 445  
 Gln Ala Leu Lys Val Leu Arg Thr Ser Glu Phe Met Pro Tyr Val Val  
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 Phe Ile Ala Ala Pro Glu Leu Glu Thr Leu Arg Ala Met His Lys Ala

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&lt;210&gt; 5228

&lt;211&gt; 550

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5228

Arg	Leu	Gly	Val	Val	Glu	Ile	Gly	Arg	Ile	Pro	Gly	Gly	Ile	Trp	Glu
1				5					10				15		
Asn	Leu	Thr	Glu	Leu	Pro	Ser	Ser	Thr	Gly	Ala	Glu	Glu	Ile	Asp	Leu
			20					25					30		
Ile	Phe	Leu	Lys	Gly	Ile	Met	Glu	Asn	Pro	Ile	Val	Lys	Ser	Leu	Ala

50                      55                      60  
 Gly Pro Leu Ser Trp Tyr Tyr Leu Phe Pro Trp Ala Cys Pro Ser Asp  
 65                      70                      75                      80  
 Gln Ala Cys Gln Asp Ser Ala Tyr Val Ser Pro Ser Pro Ser Ser Ala  
                     85                      90                      95  
 Leu Gly Pro Ser Leu Pro Gln Pro Gln Leu Pro Pro Pro Gly Ser Pro  
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 Pro

<210> 5227

<211> 2366

<212> DNA

<213> Homo sapiens

<400> 5227

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      1           5           10           15
Phe Ile Asp Ile Ala Cys Asp Glu Ile Pro Glu Arg Tyr Tyr Lys Glu
      20           25           30
Ser Glu Asp Pro Lys His Phe Lys Ser Glu Lys Thr Gly Arg Gly Gln
      35           40           45
Leu Arg Glu Gly Trp Arg Asp Ser His Gln Pro Ile Met Cys Ser Tyr
      50           55           60
Lys Leu Val Thr Val Lys Phe Glu Val Trp Gly Leu Gln Thr Arg Val
      65           70           75           80
Glu Gln Phe Val His Lys Val Val Arg Asp Ile Leu Leu Ile Gly His
      85           90           95
Arg Gln Ala Phe Ala Trp Val Asp Glu Trp Tyr Asp Met Thr Met Asp
      100          105          110
Asp Val Arg Glu Tyr Glu Lys Asn Met His Glu Gln Thr Asn Ile Lys
      115          120          125
Val Cys Asn Gln His Ser Ser Pro Val Asp Asp Ile Glu Ser His Ala
      130          135          140
Gln Thr Ser Thr
145

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&lt;210&gt; 5225

&lt;211&gt; 394

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5225

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120
caggcctggg cagacggaca tgcccaaggg aacagatagt accaggacag gggaccctgg
180
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240
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300
tgtgaggaca cggctgggttc aggaagtgga gtgacaaatg ggctgtgctg gacttgcttt
360
ccccacatga aggttaggaa ccaagagaac ggcc
394

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&lt;210&gt; 5226

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5226

```

Met Trp Gly Lys Gln Val Gln His Ser Pro Phe Val Thr Pro Leu Pro
 1           5           10           15
Glu Pro Thr Val Ser Ser His Pro Leu Gly Asp Gly Gln Ser Pro Arg
      20           25           30
Phe Ala Ser His Ile Pro Ala Asp Pro Pro Cys Leu Pro Pro Gly Leu
      35           40           45
Gly Gly Ala Val Ser Thr Gly Gly Gln Ala Ile Ala Pro Ser Asp Gln

```

<213> Homo sapiens

<400> 5222

```

Xaa Arg Thr Leu Gln Val Glu Thr Leu Val Glu Pro Pro Glu Pro Cys
 1           5           10           15
Ala Glu Pro Ala Ala Phe Gly Asp Thr Leu His Ile His Tyr Thr Gly
      20           25           30
Ser Leu Val Asp Gly Arg Ile Ile Asp Thr Ser Leu Thr Arg Asp Pro
      35           40           45
Leu Val Ile Glu Leu Gly Gln Lys Gln Val Ile Pro Gly Leu Glu Gln
      50           55           60
Ser Leu Leu Asp Met Cys Val Gly Glu Lys Arg Arg Ala Ile Ile Pro
65           70           75           80
Ser His Leu Ala Tyr Gly Lys Arg Gly Phe Pro Pro Ser Val Pro Gly
      85           90           95
Thr Lys Asp Asn Leu Met Arg Pro Pro Gly Met Thr Ser Ser Ser Gln
      100           105           110

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<210> 5223

<211> 637

<212> DNA

<213> Homo sapiens

<400> 5223

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120
tcagagaaga caggacgggg acagttgagg gaaggctgga gagatagtca tcagcctatc
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240
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300
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360
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420
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637

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<210> 5224

<211> 148

<212> PRT

<213> Homo sapiens

<400> 5224

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Xaa Thr Ile Phe Asp Asn Glu Ala Lys Asp Val Glu Arg Glu Val Cys

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&lt;400&gt; 5220

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Met Ala Ala Thr Glu Pro Ile Leu Ala Ala Thr Gly Ser Pro Ala Ala
 1           5           10           15
Val Pro Pro Glu Lys Leu Glu Gly Ala Gly Ser Ser Ser Ala Pro Glu
           20           25           30
Arg Asn Cys Val Gly Ser Ser Leu Pro Glu Ala Ser Pro Pro Ala Pro
           35           40           45
Glu Pro Ser Ser Pro Asn Ala Ala Val Pro Glu Ala Ile Pro Thr Pro
           50           55           60
Arg Ala Ala Ala Ser Ala Ala Leu Glu Leu Pro Leu Gly Pro Ala Pro
           65           70           75           80
Val Ser Val Ala Pro Gln Ala Glu Ala Glu Ala Arg Ser Thr Pro Gly
           85           90           95
Pro Ala Gly Ser Arg Leu Gly Pro Glu Thr Phe Arg Gln Arg Phe Arg
           100          105          110
Gln Phe Arg Tyr Gln Asp Ala Ala Gly Pro Arg Glu Ala Phe Arg Gln
           115          120          125
Leu Arg Glu Leu Ser Arg Gln Trp Leu Arg Pro Asp Ile Arg Thr Lys
           130          135          140
Glu Gln Ile Val Glu Met Leu Val Gln Glu Gln Leu Leu Ala Ile Leu
           145          150          155          160
Pro Glu Ala Ala Arg Ala Arg Arg Ile Arg Arg Arg Thr Asp Val Arg
           165          170          175
Ile Thr Gly

```

&lt;210&gt; 5221

&lt;211&gt; 497

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5221

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120
gacacctccc tgaccagaga ccctctggtt atagaacttg gccaaaagca ggtgattcca
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240
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300
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360
ttgggccaca tgggtctgct gcctgtgcca ccacctttcc cagaacactg gacttctttc
420
ctgccctttt ctacaactct acgtgtgtgc agctgtacag ccacccccca ccccttcctt
480
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497

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&lt;210&gt; 5222

&lt;211&gt; 112

&lt;212&gt; PRT

<210> 5219  
<211> 1212  
<212> DNA  
<213> Homo sapiens

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aacgtctccc tgctaccccc acccccgcgc agacgcagtg ctgagcacac agctaccgga  
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caaagagtga cgcccgagc tggagttatg gcggctacgg agccgatctt ggccggccact  
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<210> 5220  
<211> 179  
<212> PRT  
<213> Homo sapiens

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 Gln Glu Arg Gly Leu Arg Ser Gln Cys Glu Cys Leu Arg Gly Arg Lys  
 145 150 155 160  
 Ala Ser Leu Glu Glu Leu Gln Ser Val His Ser Glu Arg His Val Leu  
 165 170 175  
 Leu Tyr Gly Thr Asn Pro Leu Ser Arg Leu Lys Leu Asp Asn Gly Lys  
 180 185 190  
 Leu Ala Gly Leu Leu Ala Gln Arg Met Phe Val Met Leu Pro Cys Gly  
 195 200 205  
 Gly Val Gly Val Asp Thr Asp Thr Ile Trp Asn Glu Leu His Ser Ser  
 210 215 220  
 Asn Ala Ala Arg Trp Ala Ala Gly Ser Val Thr Asp Leu Ala Phe Lys  
 225 230 235 240  
 Val Ala Ser Arg Glu Leu Lys Asn Gly Phe Ala Val Val Arg Pro Pro  
 245 250 255  
 Gly His His Ala Asp His Ser Thr Ala Met Gly Phe Cys Phe Phe Asn  
 260 265 270  
 Ser Val Ala Ile Ala Cys Arg Gln Leu Gln Gln Gln Ser Lys Ala Ser  
 275 280 285  
 Lys Ile Leu Ile Val Asp Trp Asp Val His His Gly Asn Ala Thr Gln  
 290 295 300  
 Gln Thr Phe Tyr Gln Asp Pro Ser Val Leu Tyr Ile Ser Leu His Arg  
 305 310 315 320  
 His Asp Asp Gly Asn Phe Phe Pro Gly Ser Gly Ala Val Asp Glu Val  
 325 330 335  
 Gly Ala Gly Ser Gly Glu Gly Phe Asn Val Asn Val Ala Trp Ala Gly  
 340 345 350  
 Gly Leu Asp Pro Pro Met Gly Asp Pro Glu Tyr Leu Ala Ala Phe Arg  
 355 360 365  
 Ile Val Val Met Pro Ile Ala Arg Glu Phe Ser Pro Asp Leu Val Leu  
 370 375 380  
 Val Ser Ala Gly Phe Asp Ala Ala Glu Gly His Pro Ala Pro Leu Gly  
 385 390 395 400  
 Gly Tyr His Val Ser Ala Lys Cys Phe Gly Tyr Met Thr Gln Gln Leu  
 405 410 415  
 Met Asn Leu Ala Gly Gly Ala Val Val Leu Ala Leu Glu Gly Gly His  
 420 425 430  
 Asp Leu Thr Ala Ile Cys Asp Ala Ser Glu Ala Cys Val Ala Ala Leu  
 435 440 445  
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 450 455 460  
 Pro Asn Leu Asn Ala Ile Arg Ser Leu Glu Ala Val Ile Arg Val His  
 465 470 475 480  
 Ser Lys Tyr Trp Gly Cys Met Gln Arg Leu Ala Ser Cys Pro Asp Ser  
 485 490 495  
 Trp Val Pro Arg Val Pro Gly Ala Asp Lys Glu Glu Val Glu Ala Val  
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 Ser Glu Gln Leu Val Glu Glu Glu Glu Pro Met Asn Leu  
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&lt;210&gt; 5218

&lt;211&gt; 541

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5218

Met	Ala	Gly	Asp	Arg	Ala	Arg	Trp	Trp	Thr	Met	Ala	Trp	Ser	Thr	Gly
1			5					10					15		
Ser	Trp	Ala	Met	Gly	Ser	Leu	Arg	Pro	Glu	Ala	Pro	Leu	Leu	Ser	Ser
		20					25					30			
Ser	Thr	Leu	Arg	Cys	Cys	Ser	Gly	Asn	Ser	Ser	Asp	Trp	Leu	Gly	Gly
	35					40					45				
Ser	Pro	Gly	Ala	Ala	Pro	Gly	Thr	Leu	Cys	Cys	Phe	Leu	Trp	Pro	Arg
	50				55						60				
Val	Gly	Thr	Gly	Leu	Cys	Pro	Gly	Leu	Ser	Leu	Pro	Gln	Pro	His	Leu
65				70					75				80		
Pro	His	Cys	Gln	Pro	Gln	Ser	Leu	Pro	Ala	Xaa	Ala	Arg	Val	Leu	Ser
			85				90					95			
Ser	Ser	Glu	Thr	Pro	Ala	Arg	Thr	Leu	Pro	Phe	Thr	Thr	Gly	Leu	Ile
	100						105					110			
Tyr	Asp	Ser	Val	Met	Leu	Lys	His	Gln	Cys	Ser	Cys	Gly	Asp	Asn	Ser

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1 5 10 15  
Thr Arg Gln Gln Val Phe Lys Asn Asp Ala Arg Ala Leu Glu Ala Ala  
20 25 30  
Arg Ile Lys Ile Asn Glu Glu Phe Lys Asn Asn Lys Ser Glu Thr Ser  
35 40 45  
Ser Lys Lys Ile Glu Glu Leu Met Lys Ile Gly Ser Asp Val Glu Leu  
50 55 60  
Leu Leu Arg Thr Ser Val Ile Gln Gly Ile His Thr Asp His Asn Thr  
65 70 75 80  
Leu Lys Leu Val Pro Arg Lys Asp Leu Leu Val Glu Asn Val Pro Tyr  
85 90 95  
Cys Asp Ala Pro Thr Gln Lys Gln  
100

<210> 5213  
<211> 4387  
<212> DNA  
<213> Homo sapiens

<400> 5213  
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cccaccaaac catggtcctt taaggcacgc tcctgtcctc ctcattgccc agcagtaggg  
 780  
 aggggcaggg gtaaggggac ctgaggataa aggggtggga aacaggggcc cctgaggcct  
 840  
 gtgggggctg caggggagga ggatgtacct tgtgtctctt tcaagtgcct taatccgagc  
 900  
 cagcagggcc ttctgcttgc ctgctgccat actgtatgta ggaaagtgtt ctgtggctgc  
 960  
 tttgtgtcaa gaaaagagca gtcactctca gaatcttgat tccccatcag ccaaagcaaa  
 1020  
 agatggctgc tgctttgtag gcatgtgcct gcaagtggga ccttgctggg cattatatgc  
 1080  
 cctgtggggg ttccagagac cctgaaagag gagggaggac ccgcctcctt gtctgcacaa  
 1140  
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 1200  
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 1260  
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 1320  
 gggggcactt ttcttttgag gctctagtgg aggtggatgt ccttctctgc caggcttggc  
 1380  
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 1440  
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 1560  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa  
 1592

<210> 5210

<211> 85

<212> PRT

<213> Homo sapiens

<400> 5210

Ile	Leu	Trp	Gly	Leu	Lys	Leu	Val	Ile	Phe	Leu	Ala	Gly	Phe	Val	Ala
1				5				10					15		
Leu	Met	Arg	Ser	Val	Pro	Asp	Pro	Ser	Thr	Arg	Ala	Leu	Leu	Leu	Leu
				20				25					30		
Ala	Leu	Leu	Ile	Leu	Tyr	Ala	Leu	Leu	Ser	Arg	Leu	Thr	Gly	Ser	Arg
				35				40					45		
Ala	Ser	Gly	Ala	Gln	Leu	Glu	Ala	Lys	Val	Arg	Gly	Leu	Glu	Arg	Gln
				50				55					60		
Val	Glu	Glu	Leu	Arg	Trp	Arg	Gln	Arg	Arg	Ala	Ala	Lys	Gly	Ala	Arg
				65				70					75		80
Ser	Val	Glu	Glu	Glu											
				85											

<210> 5211

<211> 602

<212> DNA

<213> Homo sapiens

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5208

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Met Val Ser Thr Tyr Arg Val Ala Val Leu Gly Ala Arg Gly Val Gly
 1           5           10           15
Lys Ser Ala Ile Val Arg Gln Phe Leu Tyr Asn Glu Phe Ser Glu Val
      20           25           30
Cys Val Pro Thr Thr Ala Arg Arg Leu Tyr Leu Pro Ala Val Val Met
      35           40           45
Asn Gly His Val His Asp Leu Gln Ile Leu Asp Phe Pro Pro Ile Ser
      50           55           60
Ala Phe Pro Val Asn Thr Leu Gln Glu Trp Ala Asp Thr Cys Cys Arg
      65           70           75           80
Gly Leu Arg Ser Val His Ala Tyr Ile Leu Val Tyr Asp Ile Cys Cys
      85           90           95
Phe Asp Ser Phe Glu Tyr Val Lys Thr Ile Arg Gln Gln Ile Leu Glu
      100          105          110
Thr Arg Val Ile Gly Thr Ser Glu Thr Pro Ile Ile Ile Val Gly Asn
      115          120          125
Lys Arg Asp Leu Gln Arg Gly Arg
      130          135

```

&lt;210&gt; 5209

&lt;211&gt; 1592

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5209

```

atcctgtggg gcctgaagct tgtcatcttc ctggccggct tcgtggccct gatgaggtcg
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gtgcctgacc cttccacccg ggcctgcta ctctggcct tgctgatact ctacgcctcg
120
ctgagccggc tcaactggctc ccgagcctct ggggcccaac tcgaggccaa ggtgcgaggg
180
ctggaacgcc aggtggagga gctgcgctgg cgccagaggc gagcggccaa gggggccgcg
240
agtgtggagg aggagtgagc cggatgcccc acacaccgcc agtgtcatac caaagagctg
300
agctgcttcg gggccatgca gcctcctgc cagccccctg cccttttctt gccctgtctc
360
tgaaccttca gaacattgat ccttgccgca gcccactag ccaagagaaa cagagaaaga
420
ccattccccc tgctgtcct tgcggcctg tcttctgagg ttctctgtct ggggttggtc
480
ctcttaaccc tttctctgct ccagcctgc ctaccaggg aagggttgag gggcctccct
540
ctggcttctg catctgcgcc agcaaacatc actgccgttg gtctctcatg acttaactgg
600
cttccctctg ctgtgcctt ggcttctctc taatgctcgt gctctcctgt ccttctgaag
660
ttgtccttg gccaaatctc cagctccctt cttgttttcc tcatectcct accctgtact
720

```

```

      50              55              60
Ile Val Lys Leu Tyr Ala His Lys Gly Asp Ala Val Thr Val Tyr Val
65              70              75              80
Ser Gly Gly Asn Pro Ile Leu Phe Glu Leu Glu Lys Asn Leu Tyr Pro
      85              90              95
Thr Val Tyr Thr Leu Trp Ser Tyr Pro Asp Leu Leu Pro Thr Phe Thr
      100             105             110
Thr Trp Pro Leu Val Leu Glu Lys Leu Val Gly Gly Ala Asp Leu Met
      115             120             125
Leu Pro Gly Leu Val Met Pro Pro Ala Gly Leu Pro Gln Val Gln Lys
      130             135             140
Gly Asp Leu Cys Ala Ile Ser Leu Val Gly Asn Arg Ala Pro Val Ala
145             150             155             160
Ile Gly Val Ala Ala Met Ser Thr Ala Glu Met Leu Thr Ser Gly Leu
      165             170             175
Lys Gly Arg Gly Phe Ser Val Leu His Thr Tyr Gln Asp His Leu Trp
      180             185             190
Arg Ser Gly Asn Lys Ser Ser Pro Pro Ser Ile Ala Pro Leu Ala Leu
      195             200             205
Asp Ser Ala Asp Leu Ser Glu Glu Lys Gly Ser Val Gln Met Asp Ser
      210             215             220
Thr Leu Gln Gly Asp Met Arg His Met Thr Leu Glu Gly Glu Glu Glu
225             230             235             240
Asn Gly Glu Val His Gln Gly Thr
      245

```

&lt;210&gt; 5207

&lt;211&gt; 594

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5207

```

ncggccggcc agggcagggg gcacctagga cggccccggt ccaggtggag gccgcagagg
60
gccaggggca agcagaggca gcaatggttg gtcctgacgg tggctgagcc cccagcccct
120
ggaatatgca gcccggggga gccccagaca gcggcaagga cgaggtggcg gagtggggcg
180
ggaggcatgg tctccaccta ccgggtggcc gtgctggggg cgcgaggtgt gggcaagagt
240
gccatcgtgc gccagttctt gtacaacgag ttcagcgagg tctgcgtccc caccaccgcc
300
cgccgccttt acctgcctgc tgctgcatg aacggccacg tgcacgacct ccagatcctc
360
gactttccac ccatcagcgc ctccctgtc aatacgctcc aggagtgggc agacacctgc
420
tgcaaggggac tccggagtgt ccacgcctac atcctggtct acgacatctg ctgctttgac
480
agctttgagt acgtcaagac catccgccag cagatcctgg agacgagggg gatcggaacc
540
tcagagacgc ccatcatcat cgtgggcaac aagcgggacc tgcagcgcg acgc
594

```

&lt;210&gt; 5208

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 960  
 gctgacctcc ctttactcac cagcactttc cttggcagcc acatgttttc ctgctgcccc  
 1020  
 gaangacgac aactggacat aaagaagtca agctacaaaa agctctctaa gttcctgcag  
 1080  
 caaatgcagc aggagcagat tatacaggtg aaggagctga gcaaaggggt ggagagcatt  
 1140  
 gtggctgtgg actggaaaca cccgaggatt acatcttttcg tcatacccca gccctccccg  
 1200  
 acctcccaga ctatccagga gggtagcagg gaacagccct atcacccctcc agatataaaa  
 1260  
 cccctctact gtgtcccagc cagcatgacc ctgctcttcc aggagtctgg ccacaagaag  
 1320  
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 1380  
 gacctggttg atgcagacaa caaaaatctt gtgagattgg atcccatcct atgtgactgc  
 1440  
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 1500  
 aggtgttttg aaaaattaca gcctgcctat caagtgaccc ttcccggaca agagcccatt  
 1560  
 gtgaagaaag ggagaatctg tccaattgac atcacccctag cacaaagagc gtctaataaa  
 1620  
 aaggtgaccg tgggtccgaa cttggaggcc tatgggtctgg acccatactc agtggctgcc  
 1680  
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 1740  
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 1800  
 gagtatcagc tccctcgaaa acacatccaa ggtctagaaa aggccctcaa acctggcaag  
 1860  
 aagaagtgac agactctttt gtctcacgtg gtggatccgg tggaaatcca agctctgggc  
 1920  
 tggtaatttt tatgagcatt ttcagctttt gcaaatacaa aatataattc ttacaaaaa  
 1980  
 taaattttta ttctgatcta aaaaaaaaaa a  
 2011

&lt;210&gt; 5206

&lt;211&gt; 248

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5206

His	Ser	Leu	Ala	Ser	Val	Leu	Ser	Ser	Pro	Gly	His	Pro	Ser	Arg	His
1				5					10					15	
Val	Ala	Lys	Ala	Phe	Arg	Val	Lys	Ser	Asn	Thr	Ala	Ile	Lys	Gly	Ser
			20					25					30		
Asp	Arg	Arg	Lys	Leu	Arg	Ala	Asp	Val	Thr	Thr	Ala	Phe	Pro	Thr	Leu
			35				40					45			
Gly	Thr	Asp	Gln	Val	Ser	Glu	Leu	Val	Pro	Gly	Lys	Glu	Glu	Leu	Asn

	100		105		110										
Gln	Leu	Glu	Ala	Glu	Ile	Glu	Glu	Thr	Tyr	Ala	Asn	Phe	Ile	Lys	His
	115					120					125				
Asn	Asp	Gly	Lys	Asn	Ile	Phe	Tyr	Ala	Ala	Arg	Thr	Pro	Ala	Thr	Leu
	130					135					140				
Phe	Ala	Val	Met	Phe	Ala	Met	Tyr	Ile	Ile	Ser	Gly	Leu	Thr	Gly	Phe
145					150					155					160
Ile	Gly	Leu	Asn	Ser	Ile	Ala	Val	Leu	Cys	Asn	Leu	Val	Met	Gly	Leu
			165					170						175	
Ala	Leu	Ile	Phe	Leu	Cys	Thr	Trp	Ala	Tyr	Val	Lys	Tyr	Ser	Gly	Glu
	180							185					190		
Phe	Arg	Glu	Ile	Gly	Thr	Val	Ile	Asp	Gln	Ile	Ala	Glu	Thr	Leu	Trp
	195						200					205			
Glu	Gln	Val	Leu	Lys	Pro	Leu	Gly	Asp	Asn	Leu	Met	Glu	Glu	Asn	Ile
	210					215					220				
Arg	Gln	Ser	Val	Thr	Asn	Ser	Ile	Lys	Ala	Gly	Leu	Thr	Asp	Gln	Val
225					230					235				240	
Ser	His	His	Ala	Arg	Leu	Lys	Thr	Asp							
			245												

&lt;210&gt; 5205

&lt;211&gt; 2011

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5205

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cggccgggcc ccagcatggg tgtccccacg gctgagggcc tggcagctgc tgcgccctcg
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120
gccaaggcct ttcgggtcaa gtccaacacg gccatcaagg ggtcggacag gagaaagctt
180
cgagctgatg tgacaactgc tttccccacc cttggaactg atcaagtctc tgagttagta
240
cctggaaagg aggagctcaa cattgtgaag ttgtatgtct acaaagggga tgcagtgact
300
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360
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420
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540
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660
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720
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780
gaagaggaga atggggaggt tcaccagggc acgtgaagac aatctctctc agaagcccca
840

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ttgtttgtta gttttaagca ttcttttaaat ggctcctaag acatgcagat ggactgagga  
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 1020  
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 1080  
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 1140  
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 1200  
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 1560  
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 1740  
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 1800  
 agttatttcc tgtaatttat tttcagtaca taattaaaaa tttgttgat atataaaaaa  
 1860  
 aaa  
 1863

&lt;210&gt; 5204

&lt;211&gt; 249

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5204

Glu	Asn	Leu	Val	Glu	Lys	Glu	Ile	Ser	Gly	Ser	Lys	Val	Thr	Cys	Arg
1				5					10					15	
Asp	Leu	Val	Glu	Tyr	Phe	Lys	Ala	Tyr	Ile	Lys	Ile	Tyr	Gln	Gly	Glu
		20						25					30		
Glu	Leu	Pro	His	Pro	Lys	Ser	Met	Leu	Gln	Ala	Thr	Ala	Glu	Ala	Asn
		35					40					45			
Asn	Leu	Ala	Ala	Val	Ala	Gly	Ala	Arg	Asp	Thr	Tyr	Cys	Lys	Ser	Met
		50				55				60					
Glu	Gln	Val	Cys	Gly	Gly	Asp	Lys	Pro	Tyr	Ile	Ala	Pro	Ser	Asp	Leu
65				70					75					80	
Glu	Arg	Lys	His	Leu	Asp	Leu	Lys	Glu	Val	Ala	Ile	Lys	Gln	Phe	Arg
			85					90					95		
Ser	Val	Lys	Lys	Met	Gly	Gly	Asp	Glu	Phe	Cys	Arg	Arg	Tyr	Gln	Asp

&lt;213&gt; Homo sapiens

&lt;400&gt; 5202

```

Ser Pro Gly Pro Arg Gly Leu Pro Glu Gly Pro Gln Ala Leu Gly Arg
 1           5           10           15
Val Ala Val Gly Gly Gln Val His Cys Pro Glu Val Leu Ser Ala Leu
      20           25           30
Ser Gln Gly Ser Leu Glu Arg Gly Leu Ala Gly Leu Gly Gly His Arg
      35           40           45
Pro His Ser Gly Leu Pro Ala Gln Gly Arg Arg Pro Glu Pro Val Trp
      50           55           60
Pro Cys Ser Pro Gly Gln Ser Trp Ala Cys Arg Val Phe Leu Pro Gly
65           70           75           80
Arg Cys Arg Cys Trp Pro Ser Ala Gly Gly Arg Arg Trp Glu Ser Trp
      85           90           95
Ile Phe Cys Phe Phe Leu Ser Phe Phe Phe Leu Arg
      100           105

```

&lt;210&gt; 5203

&lt;211&gt; 1863

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5203

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120
cttcaggcaa cagctgaagc taataatctt gctgcagtag caggagcaag agatacctat
180
tgtaaaagta tggaacaggt atgtggaggg gacaagcctt acattgcacc ttcagatctg
240
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360
acctatgcaa attttataaa gcacaatgat ggcaaaaata tcttctatgc tgctcgtagc
420
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540
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600
gatcagattg ctgaaacact atgggaacag gtattgaagc ccctgggtga taatttgatg
660
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720
tctcatcatg ccagattaaa gacagactga cagttcatct cctcaaggac tccactctct
780
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caactgtaga agtagtttag tgtaactggc ttcacagatg gctgccacag agtgtgaaga
900

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4800  
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4860  
aatttttctt tgcattctgg cagaataaac aggtgttttt agttttccca ctgtctgagc  
4920  
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5340  
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6000  
cggtcctaca gcactgtgta ggctgcatct gtttctgtgt ggtcctgttg acttgatga  
6060  
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6104

&lt;210&gt; 5202

&lt;211&gt; 108

&lt;212&gt; PRT

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3120  
ctggctccag cctcattctc tctttagttt aactatgcaa agagaggagg ttgagagtgt  
3180  
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gggcagcagt gtccatgttt atggagatca gaggtgtccc cactgtgtgg ctggactgta  
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&lt;210&gt; 5201

&lt;211&gt; 6104

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5201

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<210> 5200

<211> 358

<212> PRT

<213> Homo sapiens

<400> 5200

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 Gln Gly Ala Asp Asp Val Thr Ser Val Leu Phe Ser Pro Ser Cys Pro  
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 Thr Lys Leu Tyr Ala Ser His Gly Glu Thr Ile Ser Val Leu Asp Val  
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 Arg Ser Leu Lys Asp Ser Leu Asp His Phe His Val Asn Glu Glu Glu  
 85 90 95  
 Ile Asn Cys Leu Ser Leu Asn Gln Thr Glu Asn Leu Leu Ala Ser Ala  
 100 105 110  
 Asp Asp Ser Gly Ala Ile Lys Ile Leu Asp Leu Glu Asn Lys Lys Val  
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 Gly Asn Ile Phe Ser Cys Gly Ala Glu Asp Gly Lys Val Arg Ile Phe  
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<211> 283

<212> PRT

<213> Homo sapiens

<400> 5198

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Pro	Arg	Lys	Leu	His	Gly	Trp	Ala	Pro	Gly	Pro	Asp	Tyr	Gln	Lys	Ser
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Lys	Pro	Pro	Pro	Arg	Gln	Lys	Phe	Ile	Gln	Ser	Glu	Met	Ser	Glu	Ala
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Leu Phe Glu Ala Ala Gly Asp Ile Phe Phe Asp Gly Ala Trp Glu Arg
          115          120          125
Glu Lys Ala Val Ser Phe Tyr Arg Asp Arg Ala Leu Pro Leu Ala Val
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Thr Thr Gly Asn Arg Lys Ala Glu Leu Arg Leu Cys Asn Lys Leu Val
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          165          170          175
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Gly Glu Leu Ala Glu His Phe Tyr Leu Lys Ala Leu Ser Leu Cys Asn
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Ser Pro Leu Glu Phe Asp Glu Glu Thr Leu Tyr Tyr Val Lys Val Tyr
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Leu Val Leu Gly Asp Ile Ile Phe Tyr Asp Leu Lys Asp Pro Phe Asp
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&lt;210&gt; 5197

&lt;211&gt; 1045

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5197

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5195

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964

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&lt;210&gt; 5196

&lt;211&gt; 267

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5196

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Thr Ile Ser Gln Leu Tyr Leu Ser Leu Gly Thr Glu Arg Ala Tyr Lys
35           40           45
Ser Ala Leu Asp Tyr Thr Lys Arg Ser Leu Gly Ile Phe Ile Asp Leu
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Gln Lys Lys Glu Lys Glu Ala His Ala Trp Leu Gln Ala Gly Lys Ile

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 <212> DNA  
 <213> Homo sapiens

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 <211> 94  
 <212> PRT  
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 Gly Gly Ala Cys Pro Ala Ser Ser Ser Leu Val Ser Pro Val Pro Arg  
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<210> 5195  
 <211> 964

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 <212> PRT  
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 Arg Gly Pro His Gly Val Trp Thr Met Glu Glu Arg Gly Leu Ala Pro  
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 Leu Ala Glu Leu His Gly Asn Met Phe Val Glu Glu Cys Ala Lys Cys  
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 Lys Thr Gln Tyr Val Arg Asp Thr Val Val Gly Thr Met Gly Leu Lys  
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 Cys Arg Gly Gly Cys Glu Ala Pro Glu Asp Ser Pro Gln Leu Pro His  
 180 185 190  
 Cys Arg Gly Glu Leu Arg Asp Thr Ile Leu Asp Trp Glu Asp Ser Leu  
 195 200 205  
 Pro Asp Arg Asp Leu Ala Leu Ala Asp Glu Ala Ser Arg Asn Ala Asp  
 210 215 220  
 Leu Ser Ile Thr Leu Gly Thr Ser Leu Gln Ile Arg Pro Ser Gly Asn  
 225 230 235 240  
 Leu Pro Leu Ala Thr Lys Arg Arg Gly Gly Arg Leu Val Ile Val Asn  
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 Leu Gln Pro Thr Lys His Asp Arg His Ala Asp Leu Arg Ile His Gly  
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 Tyr Val Asp Glu Val Met Thr Arg Leu Met Lys His Leu Gly Leu Glu  
 275 280 285  
 Ile Pro Ala Trp Asp Gly Pro Arg Val Leu Glu Arg Ala Leu Pro Pro  
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 Ser Glu Gly Lys Asp Ser Val Val Leu Gln Asn Ile Leu Arg Tyr Ile  
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 <211> 323  
 <212> DNA  
 <213> Homo sapiens

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 Trp Asn Pro Lys Ile Thr Lys Cys Leu Ala Ile Gln Val Met Ser Ser  
 35 40 45  
 Ser Ile Gln Thr His Glu Val Asn His Ser Leu Ile Pro Val Tyr Leu  
 50 55 60  
 Tyr Phe Ile Phe Ala Phe Phe Leu Leu His Val Leu Phe Leu Gln Lys  
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<210> 5191  
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 <213> Homo sapiens

&lt;400&gt; 5188

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Ser Val Cys Lys Tyr Tyr Leu Cys Gly Phe Cys Pro Ala Glu Leu Phe
      35              40              45
Thr Asn Thr Arg Ser Asp Leu Gly Pro Cys Glu Lys Ile His Asp Glu
      50              55              60
Asn Leu Arg Lys Gln Tyr Glu Lys Ser Ser Arg Phe Met Lys Val Gly
65              70              75              80
Tyr Glu Arg Asp Phe Leu Arg Tyr Leu Gln Ser Leu Leu Ala Glu Val
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Glu Arg Arg Ile Arg Arg Gly His Ala Arg Leu Ala Leu Ser Gln Asn
      100              105              110
Gln Gln Ser Ser Gly Ala Ala Gly Pro Thr Gly Lys Asn Glu Glu Lys
      115              120              125
Ile Gln Val Leu Thr Asp Lys Ile Asp Val Leu Leu Gln Gln Ile Glu
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Glu Leu Gly Ser Glu Gly Lys Val Glu Glu Ala Gln Gly Met Met Lys
      145              150              155              160
Leu Val Glu Gln Leu Lys Glu Glu Arg Glu Leu Leu Arg Ser Thr Thr
      165              170              175
Ser Thr Ile Glu Ser Phe Ala Ala Gln Glu Lys Gln Met Glu Val Cys
      180              185              190
Glu Val Cys Gly Ala Phe Leu Ile Val Gly Asp Ala Gln Ser Arg Val
      195              200              205
Asp Asp His Leu Met Gly Lys Gln His Met Gly Tyr Ala Lys Ile Lys
      210              215              220
Ala Thr Val Glu Glu Leu Lys Glu Lys Leu Arg Lys Arg Thr Glu Glu
      225              230              235              240
Pro Asp Arg Asp Glu Arg Leu Lys Lys Glu Lys Gln Glu Arg Glu Glu
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Arg Glu Lys Glu Arg Glu Arg Glu Arg Glu Glu Arg Glu Arg Lys Arg
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      275              280              285
Arg Arg Lys Arg Ser Arg Ser Arg Ser Arg His Ser Ser Arg Thr Ser
      290              295              300
Asp Arg Arg Cys Ser Arg Ser Arg Asp His Lys Arg Ser Arg Ser Arg
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Glu Arg Arg Arg Ser Arg Ser Arg Asp Arg Arg Arg Ser Arg Ser His
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Asp Arg Ser Glu Arg Lys His Arg Ser Arg Ser Arg Asp Arg Arg Arg
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Ser Lys Ser Arg Asp Arg Lys Ser Tyr Lys His Arg Ser Lys Ser Arg
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Asp Arg Glu Gln Asp Arg Lys Ser Lys Glu Lys Glu Lys Arg Gly Ser
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Asp Asp Lys Lys Ser Ser Val Lys Ser Gly Ser Arg Glu Lys Gln Ser
      385              390              395              400
Glu Asp Thr Asn Thr Glu Ser Lys Glu Ser Asp Thr Lys Asn Glu Val
      405              410              415
Asn Gly Thr Ser Glu Asp Ile Lys Ser Glu Val Gln Arg Lys Tyr Ala

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&lt;210&gt; 5188

&lt;211&gt; 489

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;211&gt; 243

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5186

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Leu Ala Ile Tyr Ser Ser Leu Val Ser Gln Ile Ser Leu Cys His Pro
 35             40             45
Gly Trp Ser Thr Val Val Arg Ser Gln Leu Thr Ala Thr Ser Ala Ser
 50             55             60
Arg Phe Lys Arg Phe Ala Cys Leu Cys Leu Ser Tyr Val Pro Phe Arg
 65             70             75             80
Lys Ile Leu Leu Gln Glu Lys Ile Trp Phe Gln Asp Val Ser Trp Thr
 85             90             95
Gly Gly His Val Pro Arg Val Pro Arg Thr Gly Trp Val Tyr Arg Asn
100             105             110
Val Gln Arg Pro Glu Ser Val Ser Asp His Met Tyr Arg Met Ala Val
115             120             125
Met Ala Met Val Ile Lys Asp Asp Arg Leu Asn Lys Asp Xaa Glu Ala
130             135             140
Met Lys Gln Ile Thr Gln Leu Leu Pro Glu Asp Leu Arg Lys Glu Leu
145             150             155             160
Tyr Glu Leu Trp Glu Glu Tyr Glu Thr Gln Ser Ser Ala Glu Ala Lys
165             170             175
Phe Val Lys Gln Leu Asp Gln Cys Glu Met Ile Leu Gln Ala Ser Glu
180             185             190
Tyr Glu Asp Leu Glu His Lys Pro Gly Arg Leu Gln Asp Phe Tyr Asp
195             200             205
Ser Thr Ala Gly Lys Phe Asn His Pro Glu Ile Val Gln Leu Val Ser
210             215             220
Glu Leu Glu Ala Glu Arg Ser Thr Asn Ile Ala Ala Ala Ala Ser Glu
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Pro His Ser

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&lt;210&gt; 5187

&lt;211&gt; 1712

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5187

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1657

&lt;210&gt; 5186

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 Met Lys Gly Gly Arg Glu Val Ala Met Lys Ile Gln Tyr Pro Gly Val  
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 Ala Cys Ala Arg Lys Phe Arg Asp Leu Leu Lys Gly His Pro Phe Phe  
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 Tyr Val Pro Glu Ile Val Asp Glu Leu Cys Ser Pro His Val Leu Thr  
 180 185 190  
 Thr Glu Leu Val Ser Gly Phe Pro Leu Asp Gln Ala Glu Gly Leu Ser  
 195 200 205  
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 Asn Phe Phe Tyr Asp Pro Gln Gln His Lys Val Ala Leu Leu Asp Phe  
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 260 265 270  
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 275 280 285  
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&lt;210&gt; 5185

&lt;211&gt; 1657

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5185

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&lt;210&gt; 5184

&lt;211&gt; 395

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5184

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Lys	Val	Arg	Gly	Ala	Ala	Leu	Lys	Leu	Gly	Gln	Met	Leu	Ser	Ile	Gln
			20					25						30	
Asp	Asp	Ala	Phe	Ile	Asn	Pro	His	Leu	Ala	Lys	Ile	Phe	Glu	Arg	Val
		35					40					45			
Arg	Gln	Ser	Ala	Asp	Phe	Met	Pro	Leu	Lys	Gln	Met	Met	Lys	Thr	Leu

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685

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 <211> 2466  
 <212> DNA  
 <213> Homo sapiens

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4362

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&lt;210&gt; 5182

&lt;211&gt; 697

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5182

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 <212> DNA  
 <213> Homo sapiens

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&lt;213&gt; Homo sapiens

&lt;400&gt; 5180

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 Tyr Val Lys Ala Lys Asp Gln Gly Phe Phe Val Lys Asn Gln Glu Gly  
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 Gly Phe Tyr His Gln Met Ala Thr Ala Glu Gly Leu Ile Lys Arg Ser  
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 Lys Gly Lys Glu Arg Pro Phe Val Leu Thr Arg Ser Phe Phe Ala Gly  
 210 215 220  
 Ser Gln Lys Tyr Gly Ala Val Trp Thr Gly Asp Asn Thr Ala Glu Trp  
 225 230 235 240  
 Ser Asn Leu Lys Ile Ser Ile Pro Met Leu Leu Thr Leu Ser Ile Thr  
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 Gly Ile Ser Phe Cys Gly Ala Asp Ile Gly Gly Phe Ile Gly Asn Pro  
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 Arg Tyr Gly Leu Leu Pro Tyr Trp Tyr Ser Leu Phe Tyr His Ala His  
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&lt;210&gt; 5180

&lt;211&gt; 444

&lt;212&gt; PRT

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5177

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&lt;210&gt; 5178

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5178

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			20					25					30		
Asn	Ser	Gln	Ile	Arg	Ser	Arg	Ser	Ser	Ser	Ser	Ser	Ser	Gly	Gly	Gly
		35					40						45		
Leu	Leu	Pro	Tyr	Pro	Arg	Arg	Arg	Pro	Pro	His	Ser	Ala	Arg	Gly	Gly
		50					55				60				
Gly	Ser	Gly	Gly	Gly	Gly	Gly	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Gln
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Gln	Gln	Leu	Arg	Asn	Phe	Ser	Arg	Ser	Arg	His	Ala				
				85						90					

&lt;210&gt; 5179

&lt;211&gt; 1527

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5179

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<213> Homo sapiens

<400> 5174

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Glu Thr Lys Arg Ser Pro Leu Gly Thr Val Leu Ser Pro Gly Ala Glu
      35           40           45
Thr Asp Arg Gly Ser Leu Leu Gly Pro Pro Glu Lys Arg Cys Pro Asp
      50           55           60
Ile Trp Cys Ser Gln Ala Val Ser Pro Ala Gly Leu Cys Phe Pro Asp
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<210> 5175

<211> 272

<212> DNA

<213> Homo sapiens

<400> 5175

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272

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<210> 5176

<211> 90

<212> PRT

<213> Homo sapiens

<400> 5176

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      20           25           30
Ser Cys Leu His Val Ser Arg Glu Gly Cys Pro Thr Pro Gly Arg Ala
      35           40           45
Ala Thr Pro Thr Pro Ser Pro Gly Thr Ala Ser Gln Arg Ser Leu Pro
      50           55           60
Cys Arg Thr Asp Arg Arg Glu Gly Ser Gly Glu Arg Cys Met Pro Pro
65           70           75           80
Gln Ala Cys Ser Glu Gly Pro Xaa Xaa Xaa
      85           90

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<211> 637

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2060

<210> 5172

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5172

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 20           25           30
Gln Gly Ser Ile Lys Asp His Thr Ala Gly Leu Arg Leu Thr Ala Leu
 35           40           45
Ser Pro Glu His Gln Ser Pro Ala Glu Ser Gly Asp Asn Thr Ser Ser
 50           55           60
Leu Gln Arg Gly Thr Ser Pro Pro Ala Ala Thr Ser Leu Arg Leu Leu
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<210> 5173

<211> 557

<212> DNA

<213> Homo sapiens

<400> 5173

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<210> 5174

<211> 93

<212> PRT

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 <211> 203  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Leu Leu Leu Phe Thr Thr Ala Gly Ile Tyr Val Asp Gly Ala Gly Arg  
 50 55 60  
 Lys Ser Arg Gly His Glu Leu Leu Trp Pro Ala Ala Pro Met Gly Trp  
 65 70 75 80  
 Gly Tyr Ala Ala Pro Tyr Leu Thr Val Phe Ser Glu Asn Ser Ile Asp  
 85 90 95  
 Val Phe Asp Val Arg Arg Ala Glu Trp Val Gln Thr Val Pro Leu Lys  
 100 105 110  
 Lys Val Arg Pro Leu Asn Pro Glu Gly Ser Leu Phe Leu Tyr Gly Thr  
 115 120 125  
 Glu Lys Val Arg Leu Thr Tyr Leu Arg Asn Gln Leu Ala Glu Lys Asp  
 130 135 140  
 Glu Phe Asp Ile Pro Asp Leu Thr Asp Asn Ser Arg Arg Gln Leu Phe  
 145 150 155 160  
 Leu Thr Lys Ser Lys Arg Arg Phe Phe Phe Arg Val Ser Glu Glu Gln  
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<210> 5171  
 <211> 2060  
 <212> DNA  
 <213> Homo sapiens

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Lys	Lys	Gly	Gln	Arg	Trp	Arg	Ser	Leu	Thr	Val	Trp	Lys	Ala	Glu	Thr
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Ser	Arg	Ala	Asp	Cys	Leu	Gly	Ala	Pro	Asn	Ile	Arg	Thr	Ala	Pro	Leu
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Gly	Arg	Ser	Glu	Lys	Arg	Thr	Ala	Ile	Cys	Phe	Ser	Thr	Gly	Ala	Gln
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Asp	Ser	Ser	Gln	Arg	Ala	Pro	Phe	Arg	Leu	Gln	Asn	Pro	Gly	Gln	Leu
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Leu	Gln	Thr	Ser	Val	Arg	Asn	Leu	Val	Pro	Ser	Ile	Leu	His	Thr	Ser
				85					90					95	
Tyr	His	Ala	Ile	Phe	Asn	Pro	Arg	Thr	Trp	Val	Leu	Leu	Cys	Pro	Cys
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Ser	Leu	Glu	Cys	Thr	Pro	Ser	Thr	Ser	Thr	Gln	Ser	Ser	Pro	Gln	Leu
				165					170					175	
Thr	Leu	Pro	Ser	Ser	Ala	Ser	Ser	Ile	Ser	Ser	Arg	Glu	Thr	Ile	Leu
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Ile	Ala	Ser	Pro	Phe	Pro	Thr									
		195													

&lt;210&gt; 5169

&lt;211&gt; 609

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5169

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600

ttcaaccac

609

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Arg	Ala	Asp	Gly	Leu	Phe	Tyr	Pro	Ser	Ala	Phe	Ser	Phe	Thr	Tyr	Thr
465			470			475								480	
Pro	Glu	Tyr	Ser	Val	Arg	Pro	Gly	His	Pro	Gly	Val	Pro	Glu	Pro	Ala
			485					490						495	
Thr	Asp	Ala	Asp	Ala	Leu	Leu	Glu	Ser	Ile	His	Gln	Glu	Phe	Thr	Arg
		500					505						510		
Thr	Asn	Phe	His	Leu	Phe	Ile	Gln	Thr							
		515					520								

&lt;210&gt; 5167

&lt;211&gt; 878

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5167

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&lt;210&gt; 5168

&lt;211&gt; 199

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5168

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 50 55 60  
 Cys Glu Gln Thr Val Arg Ile Leu His Ala Lys Val Ala Gln Lys Ser  
 65 70 75 80  
 Tyr Gly Asn Glu Lys Arg Phe Phe Cys Pro Pro Pro Cys Val Tyr Leu  
 85 90 95  
 Ser Gly Pro Gly Trp Arg Val Lys Pro Gly Gln Asp Gln Ala His Gln  
 100 105 110  
 Ala Gly Glu Thr Gly Pro Thr Val Cys Gly Tyr Met Gly Leu Asp Ser  
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 145 150 155 160  
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 Gly Gly Arg Glu Leu Gly Thr Phe His Ser Arg Leu Ile Lys Val Ile  
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 Thr Val Ser Thr Arg Tyr Leu Ser Val Glu Asp Gly Ala Phe Val Ala  
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 Pro Pro Gly Gly Gly Gly Thr Tyr Leu Cys Leu Ala Thr Glu Lys Val  
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 Thr Leu Glu Leu His Gly Glu Asn Phe His Ala Gly Leu Lys Val Trp  
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 Phe Gly Asp Val Glu Ala Glu Thr Met Tyr Arg Tyr Gly Val Xaa Ser  
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&lt;210&gt; 5166

&lt;211&gt; 521

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5166

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Gly Leu Gly Ser Met Ala His Cys Ser Gly Val Thr Tyr Tyr Gly Leu		
145	150	155
Trp Ile Asn Gly His Pro Ala Glu Gln Ala Thr Arg Ile Val Ile Leu		160
	165	170
Gly Pro Glu Val Met Glu Val Ala Gln Gly Ser Pro Phe Ser Val Asn		175
	180	185
Val Gln Leu Leu Gln Asp His Gly Glu Ile Ala Lys Ser Lys His Leu		190
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Gln Gly Glu Met Thr		205
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&lt;210&gt; 5165

&lt;211&gt; 2370

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5165

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&lt;210&gt; 5164

&lt;211&gt; 213

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5164

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 Arg His Trp Ala Trp Ser Gly Asp Thr Phe Ser Gly Gln Phe Val Leu  
 35 40 45  
 Gly Glu Pro Gln Gly Tyr Gly Val Met Glu Tyr Lys Ala Gly Gly Cys  
 50 55 60  
 Tyr Glu Gly Glu Val Ser His Gly Met Arg Glu Gly His Gly Phe Leu  
 65 70 75 80  
 Val Asp Arg Asp Gly Gln Val Tyr Gln Gly Ser Phe His Asp Asn Lys  
 85 90 95  
 Arg His Gly Pro Gly Gln Met Leu Phe Gln Asn Gly Asp Lys Tyr Asp  
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 Gly Asp Trp Val Arg Asp Arg Arg Gln Gly His Gly Val Leu Arg Cys  
 115 120 125  
 Ala Asp Gly Ser Thr Tyr Lys Gly Gln Trp His Ser Asp Val Phe Ser

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 <211> 207  
 <212> PRT  
 <213> Homo sapiens

<400> 5162  
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 Ile Lys Pro Gly Val Arg Glu Ile His Leu Cys Lys Asp Glu Arg Gly  
 20 25 30  
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 35 40 45  
 Leu Val Gln Ala Asn Thr Pro Ala Ser Leu Val Gly Leu Arg Phe Gly  
 50 55 60  
 Asp Gln Leu Leu Gln Ile Asp Gly Arg Asp Cys Ala Gly Trp Ser Ser  
 65 70 75 80  
 His Lys Ala His Gln Val Val Lys Lys Ala Ser Gly Asp Lys Ile Val  
 85 90 95  
 Val Val Val Arg Asp Arg Pro Phe Gln Arg Thr Val Thr Met His Lys  
 100 105 110  
 Asp Ser Met Gly His Val Gly Phe Val Ile Lys Lys Gly Lys Ile Val  
 115 120 125  
 Ser Leu Val Lys Gly Ser Ser Ala Ala Cys Asn Gly Leu Leu Thr Asn  
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 His Tyr Val Cys Glu Val Asp Gly Gln Asn Val Ile Gly Leu Lys Asp  
 145 150 155 160  
 Lys Lys Ile Met Glu Ile Leu Ala Thr Ala Gly Asn Val Val Thr Leu  
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 Thr Ile Ile Pro Ser Val Ile Tyr Glu His Met Val Lys Lys Leu Pro  
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<210> 5163  
 <211> 1187  
 <212> DNA  
 <213> Homo sapiens

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<213> Homo sapiens
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  65              70              75              80
His Arg His Arg Lys Lys Asp Thr Pro Val Gln Ala Ser Ser His His
      85              90              95
Leu Phe Val Gln Met Lys Ser Leu Met Cys Ser Asn Leu Gly Glu Glu
      100              105              110
Leu Glu Val Ile Phe Ser Leu Phe Asp Ser Lys Glu Asn Arg Pro Ile
      115              120              125
Ser Glu Arg Phe Phe Leu Arg Leu Asn Arg Asn Gly Leu Pro Lys Ala
      130              135              140
Pro Asp Lys Pro Glu Arg His Cys Ser Leu Phe Val Asp Leu Gly Ser
      145              150              155              160
Ser Glu Leu Arg Lys Asp Ile Tyr Ile Thr Val His Ile Ile Arg Ile
      165              170              175
Gly Arg Met Gly Ala Gly Glu Lys Lys Asn Ala Cys Ser Val Gln Tyr
      180              185              190
Arg Arg Pro Phe Gly Cys Ala Val Leu Ser Ile Ala Asp Leu Leu Thr
      195              200              205
Gly Glu Thr Lys Asp Asp Leu Ile Leu Lys Val Tyr Met Cys Asn Thr
      210              215              220
Glu Ser Glu Trp Tyr Gln Ile His Glu Asn Ile Ile Lys Lys Leu Asn
      225              230              235              240
Ala Arg Tyr Asn Leu Thr Gly Ser Asn Ala Gly Leu Ala Val Ser Leu
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Gln Leu Leu His Gly Asp Ile Glu Gln Ile Arg Arg Glu Tyr Ser Ser
      260              265              270
Val Phe Ser His Gly Val Ser Ile Thr Arg Lys Leu Gly Phe Ser Asn
      275              280              285
Ile Ile Met Pro Gly Glu Met Arg Asn Asp Leu Tyr Ile Thr Ile Glu
      290              295              300
Arg Gly Glu Phe Glu Lys Gly Gly Lys Ser Val Ala Arg Asn Val Glu
      305              310              315              320
Val Thr Met Phe Ile Val Asp Ser Ser Gly Gln Thr Leu Lys Asp Phe
      325              330              335
Ile Ser Phe Gly Ser Gly Glu Pro Pro Ala Ser Glu Tyr His Ser Phe
      340              345              350
Val Leu Tyr His Asn Asn Ser Pro Arg Trp Ser Glu Leu Leu Lys Leu
      355              360              365
Pro Ile Pro Val Asp Lys Phe Arg Gly Ala His Ile Arg Phe Glu Phe
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      385              390              395              400
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      405              410              415
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      420              425              430
Asp Thr Thr Arg Tyr Leu Lys Leu Pro Phe Ser Lys Gly Ile Phe Leu
      435              440              445
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&lt;210&gt; 5160

&lt;211&gt; 849

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5160

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			20					25					30		
Asp	Trp	Gly	Asn	Glu	Gln	Leu	Gly	Leu	Asp	Leu	Val	Pro	Arg	Lys	Glu

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&lt;210&gt; 5158

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5158

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Thr	His	Arg	Cys	Ser	Pro	Ala	Trp	Leu	Ser	Trp	Asp	Leu	Asn	Leu	Leu
	50				55				60						
Val	Lys	Ser	Phe	Ser	Leu	Ser	Glu	Val	Pro	Ser	Leu	Gln	Met	Leu	Asn
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&lt;210&gt; 5159

&lt;211&gt; 3233

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5159

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&lt;213&gt; Homo sapiens

&lt;400&gt; 5156

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Ser Gly Gly Leu Gln Trp Val Gln Leu Val Ala His Gly Ser Ala Gly
          35          40          45
Asp Asp Asn Gly Trp Leu Arg Cys His Arg Pro Pro Trp Gln Gly Leu
          50          55          60
Gly Asp Asn Glu Leu Asp Gly Cys Ser Gly Glu Val Asn Val Ser Gln
65          70          75          80
Asp Phe Val Lys Thr Leu Leu Arg Ile Cys Asn Ala Ile Pro Ser Phe
          85          90          95
Arg Gly Leu Leu Glu Ser Cys Met Phe Gly Cys Arg Ala Arg Val Thr
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Arg Asn Phe Trp Thr Leu
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&lt;210&gt; 5157

&lt;211&gt; 1310

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5157

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&lt;400&gt; 5155

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&lt;210&gt; 5156

&lt;211&gt; 118

&lt;212&gt; PRT

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&lt;210&gt; 5154

&lt;211&gt; 162

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5154

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 Ala Cys His Arg Trp Leu Gln Glu Gly Ser Thr Leu Gly Gly Thr Gly  
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 Glu Leu Ala Phe Gly Ala Asp Thr Leu Leu Thr Leu Pro Phe Leu Leu  
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 Gln Gly Val Pro Phe Pro Gln Asn Glu Ala Asn Ala Met Asp Val Val  
 65 70 75 80  
 Val Gln Phe Ala Ile His Arg Leu Gly Phe Gln Pro Gln Asp Ile Ile  
 85 90 95  
 Ile Tyr Ala Trp Ser Ile Gly Gly Phe Thr Ala Thr Trp Ala Ala Met  
 100 105 110  
 Ser Tyr Pro Asp Val Ser Ala Met Ile Leu Asp Ala Ser Phe Asp Asp  
 115 120 125  
 Leu Val Pro Leu Ala Leu Lys Val Met Pro Asp Ser Trp Ser Glu Cys  
 130 135 140  
 Ser Ser Gln Ala Cys Pro Ser Trp Glu Gly Val Gly Trp Asn Trp Glu  
 145 150 155 160  
 Leu Phe

&lt;210&gt; 5155

&lt;211&gt; 1402

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;213&gt; Homo sapiens

&lt;400&gt; 5152

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Lys Pro Thr Phe Thr Lys Gln Gln Ile Ala Asn Leu Asp Lys Gln Ala
          35           40           45
Lys Leu Ser Arg Ala Tyr Asp Gly Thr Thr Tyr Leu Pro Gly Ile Val
          50           55           60
Gly Leu Asn Asn Ile Lys Ala Asn Asp Tyr Ala Asn Ala Val Leu Gln
65           70           75           80
Ala Leu Ser Asn Val Pro Pro Leu Arg Asn Tyr Phe Leu Glu Glu Asp
          85           90           95
Asn Tyr Lys Asn Ile Lys Arg Pro Pro Gly Asp Ile Met Phe Leu Leu
          100          105          110
Val Gln Arg Phe Gly Glu Leu Met Arg Lys Leu Trp Asn Pro Arg Asn
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Phe Lys Ala His Val Ser Pro His Glu Met Leu Gln Ala Val Val Leu
          130          135          140
Cys Ser Lys Lys Thr Phe Gln Ile Thr Lys Gln Gly Asp Gly Val Asp
145          150          155          160
Phe Leu Ser Trp Phe Leu Asn Ala Leu His Ser Ala Leu Gly Gly Thr
          165          170          175
Lys Lys Lys Lys Lys Thr Ile Val Thr Asp Val Phe Gln Gly Ser Met
          180          185          190
Arg Ile Phe Thr Lys Lys Leu Pro His Pro Asp Leu Pro Ala Glu Glu
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Lys Glu Gln Leu Leu His Asn Asp Glu Tyr Gln Glu Thr Met Val Glu
          210          215          220
Ser Thr Phe Met Tyr Leu Thr Leu Asp Leu Pro Thr Ala Pro Leu Tyr
225          230          235          240
Lys Asp Glu Lys Glu Gln Leu Ile Ile Pro Gln Val Pro Leu Phe Asn
          245          250          255
Ile Leu Ala Lys Phe Asn Gly Ile Thr Glu Lys Glu Tyr Lys Thr Tyr
          260          265          270
Lys Glu Asn Phe Leu Lys Arg Phe Gln Leu Thr Lys Leu Pro Pro Tyr
          275          280          285
Leu Ile Phe Cys Ile Lys Ile Phe Thr Lys Asn Asn Phe Phe Val Glu
          290          295          300
Lys Asn Pro Thr Ser Cys Gln Phe Pro Tyr Tyr Lys Cys Gly Ser Glu
305          310          315          320
Arg Ile Leu Val

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&lt;210&gt; 5153

&lt;211&gt; 640

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5153

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2273

&lt;210&gt; 5152

&lt;211&gt; 324

&lt;212&gt; PRT

&lt;400&gt; 5150

Xaa Arg Met Ala Val Met Ala Met Gly Ile Lys Asp Asp Arg Leu Asn  
 1 5 10 15  
 Lys Asp Arg Cys Val Arg Leu Ala Leu Val His Asp Met Ala Glu Cys  
 20 25 30  
 Ile Val Gly Asp Ile Ala Pro Ala Asp Asn Ile Pro Lys Glu Glu Lys  
 35 40 45  
 His Arg Arg Glu Glu Glu Ala Met Lys Gln Ile Thr Gln Leu Leu Pro  
 50 55 60  
 Glu Asp Leu Arg Lys Glu Leu Tyr Glu Leu Trp Glu Glu Tyr Glu Thr  
 65 70 75 80  
 Gln Ser Ser Ala Glu Ala Lys Phe Val Lys Gln Leu Asp Gln Cys Glu  
 85 90 95  
 Met Ile Leu Gln Ala Ser Glu Tyr Glu Asp Leu Glu His Lys Pro Gly  
 100 105 110  
 Arg Leu Gln Asp Phe Tyr Asp Ser Thr Ala Gly Lys Phe Asn His Pro  
 115 120 125  
 Glu Ile Val Gln Leu Val Ser Glu Leu Glu Ala Glu Arg Ser Thr Asn  
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&lt;210&gt; 5151

&lt;211&gt; 2273

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5151

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 780

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Val Glu Tyr Ile Asp Arg Pro Arg Cys Cys Leu Arg Gly Lys Glu Cys
      130      135      140
Cys Ile Asn Arg Phe Gln Gln Val Glu Ser Arg Trp Gly Tyr Ser Gly
145      150      155      160
Thr Ser Asp Arg Ile Arg Phe Thr Val Asn Arg Arg Ile Ser Ile Val
      165      170      175
Gly Phe Gly Leu Tyr Gly Ser Ile His Gly Pro Thr Asp Tyr Gln Val
      180      185      190
Asn Ile Gln Ile Ile Glu Tyr Glu Lys Lys Gln Thr Leu Gly Gln Asn
      195      200      205
Asp Thr Gly Phe Ser Cys Asp Gly Thr Ala Asn Thr Phe Arg Val Met
      210      215      220
Phe Lys Glu Pro Ile Glu Ile Leu Pro Asn Val Cys Tyr Thr Ala Cys
225      230      235      240
Ala Thr Leu Lys Gly Pro Asp Ser His Tyr Gly Thr Lys Gly Leu Lys
      245      250      255
Lys Val Val His Glu Thr Pro Ala Ala Ser Lys Thr Val Phe Phe Phe
      260      265      270
Phe Ser Ser Pro Gly Asn Asn Asn Gly Thr Ser Ile Glu Asp Gly Gln
      275      280      285
Ile Pro Glu Ile Ile Phe Tyr Thr
      290      295

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<210> 5149  
 <211> 533  
 <212> DNA  
 <213> Homo sapiens

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 120  
 gataacatcc ccaaagaaga aaaacatagg cgagaagagg aagctatgaa gcagataacc  
 180  
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 240  
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 300  
 gcatctgaat atgaagacct tgaacacaaa cctgggagac tgcaagactt ctatgattcc  
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 420  
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 533

<210> 5150  
 <211> 154  
 <212> PRT  
 <213> Homo sapiens

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 2160  
 aacatttcta acaactgctc tgacattgta aagagatcca acagaatcac tctgtctgaa  
 2220  
 aaatacgctt tctgccacct acacatttct atttaggaag taaaatttgc ttcattggtca  
 2280  
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 2340  
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 2520  
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 2580  
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 2640  
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 2820  
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 aaa  
 2943

&lt;210&gt; 5148

&lt;211&gt; 296

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5148

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Ile	Asp	Lys	Ser	Thr	Met	Asp	Ala	Ile	Ser	Ala	Glu	Gly	Phe	Thr	Asp
		20						25					30		
Ile	Asp	Ile	Asp	Thr	Leu	Cys	Ala	Val	Leu	Glu	Arg	Asp	Thr	Leu	Ser
		35					40					45			
Ile	Arg	Glu	Ser	Arg	Leu	Phe	Gly	Ala	Val	Val	Arg	Trp	Ala	Glu	Ala
		50				55				60					
Glu	Cys	Gln	Arg	Gln	Gln	Leu	Pro	Val	Thr	Phe	Gly	Asn	Lys	Gln	Lys
65					70					75				80	
Val	Leu	Gly	Lys	Ala	Leu	Ser	Leu	Ile	Arg	Phe	Pro	Leu	Met	Thr	Ile
			85					90						95	
Glu	Glu	Phe	Ala	Ala	Gly	Pro	Ala	Gln	Ser	Gly	Ile	Leu	Ser	Asp	Arg
			100					105						110	
Glu	Val	Val	Asn	Leu	Phe	Leu	His	Phe	Thr	Val	Asn	Pro	Lys	Pro	Arg

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720  
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780  
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1920  
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1980  
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2040

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65	70	75
Ala Ala Gly Gly Leu Cys Cys Ser Ala Arg Gly Ser Ala Leu Pro Pro		80
	85	90
Ser Phe Leu Leu Leu Ile Ala Pro Val Cys Gly Ala Tyr Thr Pro Thr		95
	100	105
Ser Cys Asn Lys Ile Val Ala Ser Ala Lys Lys Pro Gly Ile Arg Thr		110
	115	120
Gly Ile Gln Gly Leu Lys Gly Asp Gln Gly Glu Pro Gly Pro Ser Gly		125
	130	135
Asn Pro Gly Lys Val Gly Tyr Pro Gly Pro Ser Gly Pro Leu Gly Ala		140
145	150	155
Arg Gly Ile Pro Gly Ile Lys Gly Thr Lys Gly Ser Pro Gly Asn Ile		160
	165	170
Lys Asp Gln Pro Arg Pro Ala Phe Ser Ala Ile Arg Arg Asn Pro Pro		175
	180	185
Met Gly Gly Asn Val Val Ile Phe Asp Thr Val Ile Thr Asn Gln Glu		190
	195	200
Glu Pro Tyr Gln Asn His Ser Gly Arg Phe Val Cys Thr Val Pro Gly		205
	210	215
Tyr Tyr Tyr Phe Thr Phe Gln Val Leu Ser Gln Trp Glu Ile Cys Leu		220
225	230	235
Ser Ile Val Ser Ser Arg Gly Gln Val Arg Arg Ser Leu Gly Phe		240
	245	250
Cys Asp Thr Thr Asn Lys Gly Leu Phe Gln Val Val Ser Gly Gly Met		255
	260	265
Val Leu Gln Leu Gln Gln Gly Asp Gln Val Trp Val Glu Lys Asp Pro		270
	275	280
Lys Lys Gly His Ile Tyr Gln Gly Ser Glu Ala Asp Ser Val Phe Ser		285
	290	295
Gly Phe Leu Ile Phe Pro Ser Ala		300
305	310	

&lt;210&gt; 5147

&lt;211&gt; 2943

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5147

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 1860  
 tctgctgaaa aaaaaaaaaa aaaaa  
 1885

&lt;210&gt; 5146

&lt;211&gt; 312

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5146

Pro Ala Thr Ser Glu Lys Glu Ser Ile Leu Leu Phe Pro Asp Leu Arg  
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 Cys Ala Leu Ala Gly His Asn Asp Leu Val Glu Ile His Leu Ser Gly  
 20 25 30  
 Arg Leu Gly Val Cys Thr Gly Leu Ala Cys Ala Tyr His Leu Leu Cys  
 35 40 45  
 Thr Pro Pro Thr Pro Cys Ile Pro Thr Pro Gly Leu Val Ala Pro Ala

35 40 45  
 Glu Asp Gln Phe Asp Glu Ile Val Asp Ile Ala Thr Lys Arg Lys  
 50 55 60  
 Gln Tyr Pro Arg Lys Ile Leu Glu Cys Val Ile Lys Thr Ile Lys Ala  
 65 70 75 80  
 Lys Gln Glu Ile Leu Lys Gln Tyr His Pro Val Val His Pro Leu Asp  
 85 90 95  
 Leu Lys Tyr Asp Pro Asp Pro Ala Pro His Met Glu Asn Leu Lys Cys  
 100 105 110  
 Arg Gly Glu Thr Val Ala Lys Glu Ile Ser Glu Ala Met Lys Ser Leu  
 115 120 125  
 Pro Ala Leu Ile Glu Gln Gly Glu Gly Phe Ser Gln Val Leu Arg Met  
 130 135 140  
 Gln Pro Val Ile His Leu Gln Arg Ile His Gln Glu Val Phe Ser Ser  
 145 150 155 160  
 Cys His Arg Lys Pro Asp Ala Lys Pro Glu Asn Phe Ile Thr Gln Ile  
 165 170 175  
 Glu Thr Thr Pro Thr Glu Thr Ala Ser Arg Lys Thr Ser Asp Met Val  
 180 185 190  
 Leu Lys Arg Lys Gln Thr Lys Asp Cys Pro Gln Arg Lys Trp Tyr Pro  
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 Leu Arg Pro Lys Lys Ile Asn Leu Asp Thr  
 210 215

&lt;210&gt; 5145

&lt;211&gt; 1885

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5145

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 1200  
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&lt;210&gt; 5144

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5144

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 Gln Glu Ala Ser Asp Asn Cys Phe Met Asp Ser Asp Ile Lys Val Leu

&lt;213&gt; Homo sapiens

&lt;400&gt; 5142

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 Glu Arg Leu Ile His Cys Tyr Asp Glu Glu Val Val Lys Glu Leu Met  
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 Pro Leu Val Val Asn Val Leu Glu Asn Leu Asp Ser Val Leu Ser Glu  
 35 40 45  
 Asn Gln Glu His Glu Val Glu Leu Glu Leu Leu Arg Glu Asp Asn Glu  
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 Glu Leu Gln Ile Gln Val Glu His Tyr Glu Phe Gln Thr Arg Gln Leu  
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 Gly Thr Val Arg Ala Gln Ile Gly Gly Lys Leu Val Pro Ala Gly Asp  
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 Gln Val Leu  
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&lt;210&gt; 5143

&lt;211&gt; 1666

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5143

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<212> PRT

<213> Homo sapiens

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Glu	Ala	Thr	Pro	Arg	Arg	Val	Phe	Ala	Asn	Ala	His	Thr	Tyr	His	Ile	165	170	175	
Asn	Ser	Ile	Ser	Val	Asn	Ser	Asp	Tyr	Glu	Thr	Tyr	Met	Ser	Ala	Asp	180	185	190	
Asp	Leu	Arg	Ile	Asn	Leu	Trp	Asn	Phe	Glu	Ile	Thr	Asn	Gln	Ser	Phe	195	200	205	
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Ser	Ser	Ser	Lys	Gly	Thr	Ile	Arg	Leu	Cys	Asp	Met	Arg	Ala	Ser	Ala	245	250	255	
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<212> DNA
<213> Homo sapiens
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&lt;210&gt; 5138

&lt;211&gt; 371

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5138

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Ala	Pro	Leu	Asp	Trp	Ala	Leu	Pro	Leu	Ser	Glu	Val	Pro	Ser	Asp	Trp
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Glu	Val	Asp	Asp	Leu	Leu	Cys	Ser	Leu	Leu	Ser	Pro	Pro	Ala	Ser	Leu
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Asn	Ile	Leu	Ser	Ser	Ser	Asn	Pro	Cys	Leu	Val	His	His	Asp	His	Thr
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Tyr	Ser	Leu	Pro	Arg	Glu	Thr	Val	Ser	Met	Asp	Leu	Glu	Ser	Glu	Ser

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&lt;211&gt; 3090

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5137

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<213> Homo sapiens

<400> 5136

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			20					25					30		
Gly	Leu	Leu	Ser	Gly	Gly	Leu	Pro	Arg	Lys	Cys	Ser	Val	Phe	His	Leu
			35				40					45			
Phe	Val	Ala	Cys	Leu	Ser	Leu	Gly	Phe	Phe	Ser	Leu	Leu	Trp	Leu	Gln
			50				55				60				
Leu	Ser	Cys	Ser	Gly	Asp	Val	Ala	Arg	Ala	Val	Arg	Gly	Gln	Gly	Gln
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&lt;211&gt; 157

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5134

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Gly Phe Trp Lys Arg Pro Pro Gln Arg Trp Ser Gly Gln Glu His Tyr
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His Leu Ser His Pro Asp His Tyr His His His Gly Lys Ser Asp Leu
      35           40           45
Ser Arg Gly Ser Pro Tyr Arg Glu Ser Pro Leu Gly His Phe Glu Ser
      50           55           60
Tyr Gly Gly Met Pro Phe Phe Gln Ala Gln Lys Met Phe Val Asp Val
65           70           75           80
Pro Glu Asn Thr Val Ile Leu Asp Glu Met Thr Leu Arg His Met Val
      85           90           95
Gln Asp Cys Thr Ala Val Lys Thr Gln Leu Leu Lys Leu Lys Arg Leu
      100          105          110
Leu His Gln His Asp Gly Ser Gly Ser Leu His Asp Ile Gln Leu Ser
      115          120          125
Leu Pro Ser Ser Pro Glu Pro Glu Asp Gly Asp Lys Val Tyr Lys Asn
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145          150          155

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&lt;210&gt; 5135

&lt;211&gt; 1696

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5135

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<212> DNA
<213> Homo sapiens
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<210> 5134

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<210> 5132  
 <211> 263  
 <212> PRT  
 <213> Homo sapiens

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 Tyr Gly Pro Glu Ala Ile Ala Gln Tyr Gln Gly Arg Glu Leu Tyr Glu  
 35 40 45  
 Arg Pro Pro His Leu Tyr Ala Val Ala Asn Ala Ala Tyr Lys Ala Met  
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<213> Homo sapiens

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Gly Val Gly Leu Ser Ala Lys Gly Gly Lys His Pro Gln Asp Arg Asn  
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&lt;210&gt; 5126

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5125

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&lt;210&gt; 5124

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5124

Ser	Ala	Pro	Ser	Cys	Tyr	Asp	Glu	Asp	Pro	Glu	Val	Arg	Val	Asp	Pro
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Thr	Pro	Lys	Pro	His	Leu	Ala	Ala	His	Ser	Cys	Ser	Leu	Leu	Gln	Lys
			20					25					30		
Gln	Ala	Cys	Met	Leu	Ile	Arg	Asn	Leu	Val	Ala	His	Gly	Gln	Ala	Phe
		35				40					45				
Ser	Lys	Pro	Ile	Leu	Asp	Leu	Gly	Ala	Glu	Ala	Leu	Ile	Met	Gln	Ala
	50				55					60					
Arg	Ser	Ala	His	Arg	Asp	Cys	Glu	Asp	Val	Ala	Lys	Ala	Ala	Leu	Arg
65				70					75					80	
Asp	Leu	Gly	Cys	His	Val	Glu	Leu	Arg	Glu	Leu	Trp	Thr	Gly	Gln	Arg
			85					90						95	
Gly	Asn	Leu	Ala	Pro											
			100												

&lt;210&gt; 5125

&lt;211&gt; 6244

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 780  
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 840  
 accttttggc ctttaaagat gacttcccct tgcttttttc ttcttgggt cctgctgtt  
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<210> 5122

<211> 172

<212> PRT

<213> Homo sapiens

<400> 5122

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Glu	Val	Lys	Ile	Ser	Ser	Ala	Val	Leu	Lys	Ala	Ala	Ala	His	His	Tyr
			20					25					30		
Gly	Ala	Gln	Cys	Asp	Lys	Pro	Asn	Lys	Glu	Phe	Met	Leu	Cys	Arg	Trp
		35				40						45			
Glu	Glu	Lys	Asp	Pro	Arg	Arg	Cys	Leu	Glu	Glu	Gly	Lys	Leu	Val	Asn
	50					55					60				
Lys	Cys	Ala	Leu	Asp	Phe	Phe	Arg	Gln	Ile	Lys	Arg	His	Cys	Ala	Glu
65				70					75					80	
Pro	Phe	Thr	Glu	Tyr	Trp	Thr	Cys	Ile	Asp	Tyr	Thr	Gly	Gln	Gln	Leu
			85					90					95		
Phe	Arg	His	Cys	Arg	Lys	Gln	Gln	Ala	Lys	Phe	Asp	Glu	Cys	Val	Leu
		100						105				110			
Asp	Lys	Leu	Gly	Trp	Val	Arg	Pro	Asp	Leu	Gly	Glu	Leu	Ser	Lys	Val
	115						120					125			
Thr	Lys	Val	Lys	Thr	Asp	Arg	Pro	Leu	Pro	Glu	Asn	Pro	Tyr	His	Ser
	130				135						140				
Arg	Pro	Arg	Pro	Asp	Pro	Ser	Pro	Glu	Ile	Glu	Gly	Asp	Leu	Gln	Pro
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Ala	Thr	His	Gly	Ser	Arg	Phe	Tyr	Phe	Trp	Thr	Lys				
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<210> 5123

<211> 1139

<212> DNA

<213> Homo sapiens

<400> 5123

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 agccatagga tagatcctgg agcttcctct agcctgtttt cttgcctggg agttagccat  
 180  
 gccttggtgg gctgccaaga gggtaaagta gagagatggg tctagcttga tacagtatag  
 240

115 120 125  
 Pro Leu Gln Asn Thr Met Ile Met His Pro Lys Leu Cys Leu Gln Leu  
 130 135 140  
 Ala Ile Leu Ala Trp Gly Thr Gly Leu Ala Gln Ser Leu Ile Gln Ser  
 145 150 155 160  
 Pro Ala Thr Leu Arg Leu Pro Phe Cys Ser Gln Arg Met Val Asp Asp  
 165 170 175  
 Val Val Cys Glu Val Pro Ala Leu Ile Gln Leu Ser Ser Thr Asp Thr  
 180 185 190  
 Thr Tyr Ser Glu Ile Gln Met Ser Ile Ala Ser Val Val Leu Leu Val  
 195 200 205  
 Met Pro Leu Ile Ile Ile Leu Ser Ser Ser Gly Ala Ile Ala Lys Ala  
 210 215 220  
 Val Leu Arg Ile Lys Ser Thr Ala Gly Gln Lys Lys Ala Phe Gly Thr  
 225 230 235 240  
 Cys Ile Ser His Leu Leu Val Val Ser Leu Phe Tyr Gly Thr Val Thr  
 245 250 255  
 Gly Val Tyr Leu Gln Pro Lys Asn His Tyr Pro His Glu Trp Gly Lys  
 260 265 270  
 Phe Leu Thr Leu Phe Tyr Thr Val Val Thr Pro Thr Leu Asn Pro Leu  
 275 280 285  
 Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Gly Ala Leu Ile Arg Leu  
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 Gly Arg Arg Thr Trp Asp Ser Gln Asn Asn  
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&lt;210&gt; 5121

&lt;211&gt; 944

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5121

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 300  
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&lt;210&gt; 5120

&lt;211&gt; 314

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5120

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 20 25 30  
 Ile Phe Tyr Phe Leu Thr Leu Ala Gly Asn Met Val Ile Val Leu Val  
 35 40 45  
 Ser Leu Lys Asp Pro Lys Leu His Ile Pro Met Tyr Phe Phe Leu Ser  
 50 55 60  
 Asn Leu Ser Leu Val Asp Leu Cys Leu Thr Ser Ser Cys Val Pro Gln  
 65 70 75 80  
 Met Leu Ile Asn Phe Trp Gly Pro Glu Lys Thr Ile Ser Tyr Ile Gly  
 85 90 95  
 Cys Ala Ile Gln Leu Tyr Val Phe Leu Trp Leu Gly Ala Thr Glu Tyr  
 100 105 110  
 Val Leu Leu Val Val Met Ala Val Asp Cys Tyr Val Ala Val Cys His

65					70					75				80
Ile	Ser	Arg	Cys	Ile	Ile	Ser	Ser	Cys	Pro	Gly	Pro	His	Ala	Ile Val
				85					90					95
Leu	Val	Leu	Leu	Leu	Gly	Arg	Tyr	Thr	Glu	Glu	Glu	Gln	Lys	Thr Val
			100					105					110	
Ala	Leu	Ile	Lys	Ala	Val	Phe	Gly	Lys	Ser	Ala	Met	Lys	His	Met Val
		115					120					125		
Ile	Leu	Phe	Thr	Arg	Lys	Glu	Glu	Leu	Glu	Gly	Gln	Ser	Phe	His Asp
	130					135					140			
Phe	Ile	Ala	Asp	Ala	Asp	Val	Gly	Leu	Lys	Ser	Ile	Val	Lys	Glu Cys
145					150					155				160
Gly	Asn	Arg	Cys	Cys	Ala	Phe	Ser	Asn	Ser	Lys	Lys	Thr	Ser	Lys Ala
			165					170						175
Glu	Lys	Glu	Ser	Gln	Val	Gln	Glu	Leu	Val	Glu	Leu	Ile	Glu	Lys Met
			180				185						190	
Val	Gln	Cys	Asn	Glu	Gly	Ala	Tyr	Phe	Ser	Asp	Asp	Ile	Tyr	Lys Asp
	195						200					205		
Thr	Glu	Glu	Arg	Leu	Lys	Gln	Arg	Glu	Glu	Val	Leu	Arg	Lys	Ile Tyr
	210					215						220		
Thr	Asp	Gln	Leu	Asn	Glu	Glu	Ile	Lys	Leu	Val	Glu	Glu	Asp	Lys His
225					230					235				240
Lys	Ser	Glu	Glu	Glu	Lys	Glu	Lys	Glu	Ile	Lys	Leu	Leu	Lys	Leu Lys
			245					250						255
Tyr	Asp	Glu	Lys	Ile	Lys	Asn	Ile	Arg	Glu	Glu	Ala	Glu	Arg	Asn Ile
		260					265					270		
Phe	Lys	Asp	Val	Phe	Asn	Arg	Ile	Trp	Lys	Met	Leu	Ser	Glu	Ile Trp
	275						280					285		
His	Arg	Phe	Leu	Ser	Lys	Cys	Lys	Phe	Tyr	Ser	Ser			
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&lt;210&gt; 5119

&lt;211&gt; 1450

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5119

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120

cttctgtct gtactggaac catcacagga ttttgaggaa ctacttttga accgttcccc

180

agagaggcat ttgccccagt agctatgatt ataatttgca atgacagcca cagtgtttc

240

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300

attttttatt ttttgactct tgcaggaaat atggcatag ttcttggtgc cttgaaggat

360

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420

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540

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 780  
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 900  
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 1080  
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&lt;210&gt; 5118

&lt;211&gt; 300

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5118

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Thr	Gly	Ser	Gly	Lys	Ser	Ala	Thr	Ala	Asn	Thr	Ile	Leu	Gly	Glu	Glu
			20					25					30		
Ile	Phe	Asp	Ser	Arg	Ile	Ala	Ala	Gln	Ala	Val	Thr	Lys	Asn	Cys	Gln
			35				40					45			
Lys	Ala	Ser	Arg	Glu	Trp	Gln	Gly	Arg	Asp	Leu	Leu	Val	Val	Asp	Thr
	50					55				60					
Pro	Gly	Leu	Phe	Asp	Thr	Lys	Glu	Ser	Leu	Asp	Thr	Thr	Cys	Lys	Glu

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<210> 5114  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 5114  
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 Met His Leu Thr Pro Val Ile Gly Thr Gln Arg Gly Ala Trp His Leu  
 35 40 45  
 Gln Cys Arg His Thr Gly His Arg Ser Val Gln Glu Gly Pro Phe Ala  
 50 55 60  
 Asn Val His Ser Ser Leu Cys Leu Phe Ser Tyr Ala Phe Leu Asp Trp  
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 Thr Phe Phe Pro  
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<210> 5115  
 <211> 1003  
 <212> DNA  
 <213> Homo sapiens

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      355      360      365
Asn Pro Gly Ile Leu Ser Glu Leu Cys Gly Thr Leu Ser Arg Leu Ala
      370      375      380
Ile Arg Asn Glu Phe Cys Gln Glu Val Val Asp Leu Gly Gly Leu Ser
385      390      395      400
Ile Leu Val Ser Leu Leu Ala Asp Cys Asn Asp His Gln Met Arg Asp
      405      410      415
Gln Ser Gly Val Gln Glu Leu Val Lys Gln Val Leu Ser Thr Leu Arg
      420      425      430
Ala Ile Ala Gly Asn Asp Asp Val Lys Asp Ala Ile Val Arg Ala Gly
      435      440      445
Gly Thr Glu Ser Ile Val Ala Ala Met Thr Gln His Leu Thr Ser Pro
      450      455      460
Gln Val Trp Glu Gln Ser Cys Ala Ala Leu Cys Phe Leu Ala Leu Arg
465      470      475      480
Lys Pro Asp Asn Ser Arg Ile Ile Val Glu Gly Gly Gly Ala Val Ala
      485      490      495
Ala Leu Gln Ala Met Lys Ala His Pro Gln Lys Ala Gly Val Gln Lys
      500      505      510
Gln Ala Cys Met Leu Ile Arg Asn Leu Val Ala His Gly Gln Ala Phe
      515      520      525
Ser Lys Pro Ile Leu Asp Leu Gly Ala Glu Ala Leu Ile Met Gln Ala
      530      535      540
Arg Ser Ala His Arg Asp Cys Glu Asp Val Ala Lys Ala Ala Leu Arg
545      550      555      560
Asp Leu Gly Cys His Val Glu Leu Arg Glu Leu Trp Thr Gly Gln Arg
      565      570      575
Gly Asn Leu Ala Pro
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&lt;210&gt; 5113

&lt;211&gt; 472

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5113

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420
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472

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<210> 5112

<211> 581

<212> PRT

<213> Homo sapiens

<400> 5112

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			20					25					30		
Leu	Pro	Trp	Phe	Ala	Val	Val	Leu	Gly	Tyr	Arg	Glu	Arg	Pro	Arg	Val
		35					40					45			
Ser	Gly	Arg	Pro	Ser	Leu	Gly	Ala	Pro	Gln	Arg	Leu	Arg	Ala	Tyr	Gly
	50					55					60				
Gly	Arg	Lys	Gly	Leu	Glu	Ala	Ala	Pro	Trp	Val	Thr	Thr	Ala	Arg	Pro
65					70					75				80	
Thr	Phe	Pro	His	Val	Ala	Ala	Lys	Thr	Gly	Ser	Gly	Ala	Ser	Ile	Gly
			85						90					95	
Cys	Thr	Pro	Thr	Ser	Thr	Gln	Ala	Lys	Met	Val	Ser	Lys	Arg	Ile	Ala
			100					105					110		
Gln	Glu	Thr	Phe	Asp	Ala	Ala	Val	Arg	Glu	Asn	Ile	Glu	Glu	Phe	Ala
			115					120					125		
Met	Gly	Pro	Glu	Glu	Ala	Val	Lys	Glu	Ala	Val	Glu	Gln	Phe	Glu	Ser
	130					135					140				
Gln	Gly	Val	Asp	Leu	Ser	Asn	Ile	Val	Lys	Thr	Ala	Pro	Lys	Val	Ser
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				165					170					175	
Asp	Leu	Gln	Glu	Ser	Val	Ala	Ser	Ser	Arg	Pro	Gln	Glu	Val	Ser	Ala
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Tyr	Leu	Thr	Arg	Phe	Cys	Asp	Gln	Cys	Lys	Gln	Asp	Lys	Ala	Cys	Arg
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Phe	Leu	Ala	Ala	Gln	Lys	Gly	Ala	Tyr	Pro	Ile	Ile	Phe	Thr	Ala	Arg
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Lys	Leu	Ala	Thr	Ala	Gly	Asp	Gln	Gly	Leu	Leu	Gln	Ser	Leu	Asn	
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Ala	Leu	Ser	Val	Leu	Thr	Asp	Gly	Gln	Pro	Asp	Leu	Leu	Asp	Ala	Gln
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Gly	Leu	Gln	Leu	Leu	Val	Ala	Thr	Leu	Thr	Gln	Asn	Ala	Asp	Glu	Ala
			260					265					270		
Asp	Leu	Thr	Cys	Ser	Gly	Ile	Arg	Cys	Val	Arg	His	Ala	Cys	Leu	Lys
		275					280					285			
His	Glu	Gln	Asn	Arg	Gln	Asp	Leu	Val	Lys	Ala	Gly	Val	Leu	Pro	Leu
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Leu	Thr	Gly	Ala	Ile	Thr	His	His	Gly	His	His	Thr	Asp	Val	Val	Arg
305					310					315				320	
Glu	Ala	Cys	Trp	Ala	Leu	Arg	Val	Met	Thr	Phe	Asp	Asp	Asp	Ile	Arg
				325					330					335	
Val	Pro	Phe	Gly	His	Ala	His	Asn	His	Ala	Lys	Met	Ile	Val	Gln	Glu

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2160

&lt;213&gt; Homo sapiens

&lt;400&gt; 5110

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      20           25           30
Gln Glu Ala Ser Asp Asn Cys Phe Met Asp Ser Asp Ile Lys Val Leu
      35           40           45
Glu Asp Gln Phe Asp Glu Ile Ile Val Asp Ile Ala Thr Lys Arg Lys
      50           55           60
Gln Tyr Pro Arg Lys Ile Leu Glu Cys Val Ile Lys Thr Ile Lys Ala
      65           70           75           80
Lys Gln Glu Ile Leu Lys Gln Tyr His Pro Val Val His Pro Leu Asp
      85           90           95
Leu Lys Tyr Asp Pro Asp Pro Val Leu Asn Gly Asn Ala Phe Asn Phe
      100          105          110
Ser Pro Phe Asn Met Met Leu Ala Val Asp Leu Ser Tyr Met Val Phe
      115          120          125
Ile Thr Ser Ala Pro His Met Glu Asn Leu Lys Cys Arg Gly Glu Thr
      130          135          140
Val Ala Lys Glu Ile Ser Glu Ala Met Lys Ser Leu Pro Ala Leu Ile
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Glu Gln Gly Glu Gly Phe Ser Gln Val Leu Arg Met Gln Pro Val Ile
      165          170          175
His Leu Gln Arg Ile His Gln Glu Val Phe Ser Ser Cys His Arg Lys
      180          185          190
Pro Asp Ala Lys Pro Glu Asn Phe Ile Thr Gln Ile Glu Thr
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&lt;210&gt; 5111

&lt;211&gt; 2247

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5111

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<213> Homo sapiens

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Val Gln Trp Arg Asn Leu Ser Ser Leu Gln Pro Pro Pro Gly Phe  
35 40 45  
Lys Arg Phe Ser Cys Leu Ser Leu Leu Ser Ser Trp Asp Tyr Arg Arg  
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Val Pro Pro Cys Pro Ala Asn Phe Cys Ile Phe Ser Arg Asp Arg Val  
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<213> Homo sapiens

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<211> 206  
<212> PRT

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&lt;210&gt; 5106

&lt;211&gt; 178

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5106

Met	Ala	Gly	His	Gln	His	Thr	Trp	Gln	Ala	Gly	Ser	Thr	His	Gln	Leu
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Pro	Ala	Ala	Ala	Ala	Gly	Leu	Ala	Gly	Pro	Arg	Ala	Ser	Thr	Ala	Lys
		20						25					30		
Gly	Asp	Val	Ile	Cys	Tyr	Tyr	Gly	Asn	Arg	Gly	Glu	Pro	Asp	Pro	Ile
	35						40					45			
Val	Leu	Thr	Pro	Gly	Thr	Tyr	Gly	Leu	Ser	Asn	Ala	Leu	Leu	Glu	Thr
	50					55				60					
Pro	Trp	Arg	Lys	Leu	Cys	Phe	Gly	Lys	Gln	Leu	Phe	Leu	Glu	Ala	Val
65				70					75					80	
Glu	Arg	Ser	Gln	Ala	Leu	Pro	Lys	Asp	Val	Leu	Ile	Ala	Ser	Leu	Leu
			85					90					95		
Asp	Val	Leu	Asn	Asn	Glu	Glu	Ala	Gln	Leu	Pro	Asp	Pro	Ala	Ile	Glu
	100						105					110			
Asp	Gln	Gly	Gly	Glu	Tyr	Val	Gln	Pro	Met	Leu	Ser	Lys	Tyr	Ala	Ala
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99  
1982

<210> 5104  
<211> 167  
<212> PRT  
<213> Homo sapiens

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Leu His Leu Phe Pro Gln Glu Leu Leu Gly His Phe Phe Cys Leu Trp  
35 40 45  
Pro Ala Ala Ser Leu Lys Thr Thr Lys Asp Leu Met Ser Lys Ser Leu  
50 55 60  
Ser Gly Val Cys Pro Ala Ser Ser Gly Leu Leu Arg Thr Pro His Pro  
65 70 75 80  
Glu Gly Ala Arg Arg Pro Ala Gly Leu Ala Gly Pro Gly Ser Ser Leu  
85 90 95  
Thr Ala Gly Trp Thr Ala Phe Arg Thr Cys Pro Gly Cys Ser Ala Phe  
100 105 110  
Val Ala Gly Ser Asn Trp Arg Asn Leu Glu Arg Gly Ser Cys Ala Cys  
115 120 125  
Lys Asp Gly Phe Cys Val Ser Ser Gly Phe Leu Leu Ser Gly Pro Gly  
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<210> 5105  
<211> 1359  
<212> DNA  
<213> Homo sapiens

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1980

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 195 200 205  
 Ser Tyr Leu Val Ala His Thr Leu Gly Arg Arg Met Leu Tyr Pro Gly  
 210 215 220  
 Ser Val Tyr Leu Leu Gln Lys Ala Leu Met Pro Ala Leu Leu Gln Gly  
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 245 250 255  
 Ala Cys Asp Gly Asn Glu Ile Asp Thr Met Phe Val Asp Arg Arg Gly  
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 Thr Ala Glu Pro Gln Gly Gln Lys Leu Val Ile Cys Cys Glu Gly Asn  
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 Ala Gly Phe Tyr Glu Val Gly Cys Val Ser Thr Pro Leu Glu Ala Gly  
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 Tyr Ser Val Leu Gly Trp Asn His Pro Gly Phe Ala Gly Ser Thr Gly  
 305 310 315 320  
 Val Pro Phe Pro Gln Asn Glu Ala Asn Ala Met Asp Val Val Val Gln  
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 340 345 350  
 Ala Trp Ser Ile Gly Gly Phe Thr Ala Thr Trp Ala Ala Met Ser Tyr  
 355 360 365  
 Pro Asp Val Ser Ala Met Ile Leu Asp Ala Ser Phe Asp Asp Leu Val  
 370 375 380  
 Pro Leu Ala Leu Lys Val Met Pro Asp Ser Trp Arg Gly Leu Val Thr  
 385 390 395 400  
 Arg Thr Val Arg Gln His Leu Asn Leu Asn Asn Ala Glu Gln Leu Cys  
 405 410 415  
 Arg Tyr Gln Gly Pro Val Leu Leu Ile Arg Arg Thr Lys Asp Glu Ile  
 420 425 430  
 Ile Thr Thr Thr  
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&lt;210&gt; 5103

&lt;211&gt; 1982

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5103

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&lt;210&gt; 5102

&lt;211&gt; 436

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5102

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Tyr	Arg	Glu	Arg	Asp	Ser	Glu	Arg	Ala	Pro	Ala	Ser	Val	Pro	Glu	Thr
		20						25					30		
Pro	Thr	Ala	Val	Thr	Ala	Pro	His	Ser	Ser	Ser	Trp	Asp	Thr	Tyr	Tyr
		35					40					45			
Gln	Pro	Arg	Ala	Leu	Glu	Lys	His	Ala	Asp	Ser	Ile	Leu	Ala	Leu	Ala
	50					55					60				
Ser	Val	Phe	Trp	Ser	Ile	Ser	Tyr	Tyr	Ser	Ser	Pro	Phe	Ala	Phe	Phe
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Tyr	Leu	Tyr	Arg	Lys	Gly	Tyr	Leu	Ser	Leu	Ser	Lys	Val	Val	Pro	Phe
			85					90						95	
Ser	His	Tyr	Ala	Gly	Thr	Leu	Leu	Leu	Leu	Ala	Gly	Val	Ala	Cys	
			100					105					110		
Leu	Arg	Gly	Ile	Gly	Arg	Trp	Thr	Asn	Pro	Gln	Tyr	Arg	Gln	Phe	Ile
		115					120						125		
Thr	Ile	Leu	Glu	Ala	Thr	His	Arg	Asn	Gln	Ser	Ser	Glu	Asn	Lys	Arg
		130				135					140				
Gln	Leu	Ala	Asn	Tyr	Asn	Phe	Asp	Phe	Arg	Ser	Trp	Pro	Val	Asp	Phe
145				150						155				160	
His	Trp	Glu	Glu	Pro	Ser	Ser	Arg	Lys	Glu	Ser	Arg	Gly	Gly	Pro	Ser

&lt;400&gt; 5100

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 Gly Pro Ser Ala Arg Pro Pro Pro Thr Pro Thr Trp Thr Gly Pro Gly  
 35 40 45  
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 Leu Cys Ala Pro Ser Leu Pro Asn Lys His Glu Ser Asp Val Leu Gln  
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&lt;210&gt; 5101

&lt;211&gt; 1711

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5101

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 960

```

      20      25      30
Pro Ser Phe Gln Pro Gln His Phe Gln Lys Ala Leu Phe Phe Leu Glu
      35      40      45
Thr Glu Ser Arg Cys Val Ser Gln Ala Gly Val Gln Arg Gly Asp Leu
      50      55      60
Ser Ser Leu Gln Pro Leu Pro Pro Gly Phe Lys Gln Phe Ser Cys Leu
65      70      75      80
Ser Leu Pro Ser Ser Trp Asp Tyr Arg Cys Val Pro Pro His Pro Ala
      85      90      95
Asn Phe Cys Ile Phe Ser Arg Asn Gly Val Ser Pro His Trp Pro Gly
      100      105      110
Trp Ser

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&lt;210&gt; 5099

&lt;211&gt; 801

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5099

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&lt;210&gt; 5100

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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&lt;210&gt; 5098

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5098

Met Ala Val Pro Gln Leu Gly Pro Ile Pro Val His Val Arg Thr Lys

1

5

10

15

Gly Val Phe Ala Ile Met Leu Pro Thr Lys Ser Lys Glu Cys Trp Phe

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420  
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720  
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780  
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900  
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 2230

<210> 5096  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

<400> 5096  
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 Gly Ile Pro Glu Ala Val Glu Gln His Leu Tyr Glu Met Leu Pro Glu  
 35 40 45  
 Gln Gln His Phe Pro Val Gly Thr Ala Pro Gly Asn Pro Val Pro Ser  
 50 55 60  
 Glu Gln Gly Gly Arg Thr His Pro Ser Leu Ile Arg Ile Trp Ala Arg  
 65 70 75 80  
 Arg Ala Gln Gln Gly Arg Leu Leu Arg Leu Pro Thr Ser Gln His Arg  
 85 90 95  
 Leu Ser Gly Leu Asn Pro Ser Val Leu Phe Pro Ser Trp Leu Ile Gly  
 100 105 110  
 Arg Pro Phe Ala Gly Thr His Cys Phe Asn Leu Thr Leu Pro Pro Pro  
 115 120 125  
 Ala Thr Leu Leu His Thr Pro Leu Arg Ser Ala Ser Leu Pro Cys Gln  
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 Pro Phe Asn Lys Ser Tyr Ala Gln Met  
 145 150

<210> 5097  
 <211> 3074  
 <212> DNA  
 <213> Homo sapiens

<400> 5097  
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 120  
 ggctcagcac gaggctaaag tcagaagtga gtgaaaacaa aatagcatgt tgatttaagt  
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360  
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1740  
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1800  
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1860

50		55		60
Pro Ser Leu Ser Tyr Thr	Lys Trp Lys Cys Leu Leu Tyr Cys Asn Gly			
65	70	75	80	
Val Leu Glu Pro Leu Tyr Leu Cys Pro Asn Gly Ala Arg Cys Ala Thr				
	85	90	95	
Trp Phe Gln Asp Pro Thr Arg Phe Thr Gly Thr Met Asp Ala Phe Val				
	100	105	110	
Lys Ile Val Arg His Glu Gly Thr Arg Thr Leu Trp Ser Gly Leu Pro				
	115	120	125	
Ala Thr Leu Val Met Thr Val Pro Ala Thr Ala Ile Tyr Phe Thr Ala				
	130	135	140	
Tyr Asp Gln Leu Lys Ala Phe Leu Cys Gly Arg Ala Leu Thr Ser Asp				
145	150	155	160	
Leu Tyr Ala Pro Met Val Ala Gly Ala Leu Ala Arg Leu Gly Thr Val				
	165	170	175	
Thr Val Ile Ser Pro Leu Glu Leu Met Arg Thr Lys Leu Gln Ala Gln				
	180	185	190	
His Val Ser Tyr Arg Glu Leu Gly Ala Cys Val Arg Thr Ala Val Ala				
	195	200	205	
Gln Gly Gly Trp Arg Ser Leu Trp Leu Gly Trp Gly Pro Thr Ala Leu				
	210	215	220	
Arg Asp Val Pro Phe Ser Val His Pro Pro Pro Gln Ala Leu Tyr Trp				
225	230	235	240	
Phe Asn Tyr Glu Leu Val Lys Ser Trp Leu Asn Gly Leu Arg Pro Lys				
	245	250	255	
Asp Gln Thr Ser Val Gly Met Ser Phe Val Ala Gly Gly Ile Ser Gly				
	260	265	270	
Thr Val Ala Ala Val Leu Thr Leu Pro Phe Asp Val Val Lys Thr Gln				
	275	280	285	
Arg Gln Val Ala Leu Gly Ala Met Glu Ala Val Arg Val Asn Pro Leu				
	290	295	300	
His Val Asp Ser Thr Trp Leu Leu Leu Arg Arg Ile Arg Ala Glu Ser				
305	310	315	320	
Gly Thr Lys Gly Leu Phe Ala Gly Phe Leu Pro Arg Ile Ile Lys Ala				
	325	330	335	
Ala Pro Ser Cys Ala Ile Met Ile Ser Thr Tyr Glu Phe Gly Lys Ser				
	340	345	350	
Phe Phe Gln Arg Leu Asn Gln Asp Arg Leu Leu Gly Gly				
	355	360	365	

&lt;210&gt; 5095

&lt;211&gt; 2230

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5095

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120

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180

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240

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 1620  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa  
 1662

&lt;210&gt; 5094

&lt;211&gt; 365

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5094

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 20 25 30  
 Asp Val Val Lys Val Arg Leu Gln Ser Gln Arg Pro Ser Met Ala Ser  
 35 40 45  
 Glu Leu Met Pro Ser Ser Arg Leu Trp Ser Leu Ser Tyr Thr Lys Leu

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385          390          395          400
Ala Lys Ser Arg Cys Gln Gly Tyr Trp Asn Glu Gly Arg Ala Val Ala
          405          410          415
Arg Gly Asp Arg Arg Leu Leu Thr Gly Gln Gln Leu Ala Gln Glu Ile
          420          425          430
Lys Asn Leu Ser Gly Trp Met Gly Arg Thr Gly Pro Gly Phe Thr Ser
          435          440          445
Pro Asp Glu Met Ala Ala Gln Leu His Asp Leu Arg Lys Val Glu Ala
          450          455          460
Ala Lys Arg Glu Phe Glu Glu Tyr Val Arg Gln Gln Asp Val Ala Thr
465          470          475          480
Lys Arg Ile Phe Ser Ala Leu Arg Val Leu Pro Asp Thr Met Arg Asn
          485          490          495
Leu Leu Ser Thr Gln Lys Asp Ala Ile Leu Ala Arg His Gly Val Ala
          500          505          510
Leu Leu Cys Lys Gly Arg Asp Gln Thr Leu Glu Ala Leu Glu Ala Glu
          515          520          525
Leu Gln Ala Thr Ala Lys Ala Phe Met Asp Ser Tyr Thr Met Arg Phe
          530          535          540
Cys Gly His Leu Ala Ala Val Gly Gly Ala Val Gly Ala Gly Leu Met
545          550          555          560
Gly Leu Ala Gly Gly Val Val Gly Ala Gly Met Ala Ala Ala Ala Leu
          565          570          575
Ala Ala Glu Ala Gly Met Val Ala Ala Gly Ala Ala Val Gly Ala Thr
          580          585          590
Gly Ala Ala Val Val Gly Gly Gly Val Gly Ala Gly Leu Ala Ala Thr
          595          600          605
Val Gly Cys Met Glu Lys Glu Glu Asp Glu Arg Leu Leu Glu Gly Asp
          610          615          620
Arg Glu Pro Leu Leu Gln Glu Glu
625          630

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&lt;210&gt; 5093

&lt;211&gt; 1662

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5093

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480

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&lt;211&gt; 632

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5092

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Lys Arg Glu Arg Lys Gln Ser Phe Met Gly Asn Ser Gly Asn Ser Trp
          20           25           30
Ser His Thr Pro Phe Pro Lys Leu Glu Leu Gly Leu Gly Pro Gln Pro
          35           40           45
Met Ala Pro Arg Glu Leu Pro Thr Cys Ser Ile Cys Leu Glu Arg Leu
 50           55           60
Arg Asp Pro Ile Ser Leu Asp Cys Gly His Asp Phe Cys Ile Arg Cys
 65           70           75           80
Phe Ser Thr His Arg Leu Pro Gly Cys Glu Pro Pro Cys Cys Pro Glu
          85           90           95
Cys Arg Lys Ile Cys Lys Gln Lys Arg Gly Leu Arg Ser Leu Gly Glu
          100          105          110
Lys Met Lys Leu Leu Pro Gln Arg Pro Leu Pro Pro Ala Leu Gln Glu
          115          120          125
Thr Cys Pro Val Arg Ala Glu Pro Leu Leu Leu Val Arg Ile Asn Ala
          130          135          140
Ser Gly Gly Leu Ile Leu Arg Met Gly Ala Ile Asn Arg Cys Leu Lys
          145          150          155          160
His Pro Leu Ala Arg Asp Thr Pro Val Cys Leu Leu Ala Val Leu Gly
          165          170          175
Glu Gln His Ser Gly Lys Ser Phe Leu Leu Asn His Leu Leu Gln Gly
          180          185          190
Leu Pro Gly Leu Glu Ser Gly Glu Gly Gly Arg Pro Arg Gly Gly Glu
          195          200          205
Ala Ser Leu Gln Gly Cys Arg Trp Gly Ala Asn Gly Leu Ala Gly Gly
          210          215          220
Ile Trp Met Trp Ser His Pro Phe Leu Leu Gly Lys Glu Gly Lys Lys
          225          230          235          240
Val Ala Val Phe Leu Val Asp Thr Gly Asp Ala Met Ser Pro Glu Leu
          245          250          255
Ser Arg Glu Thr Arg Ile Lys Leu Cys Ala Leu Thr Thr Met Leu Ser
          260          265          270
Ser Tyr Gln Ile Leu Ser Thr Ser Gln Glu Leu Lys Asp Thr Asp Leu
          275          280          285
Asp Tyr Leu Glu Met Phe Val His Val Ala Glu Val Met Gly Lys His
          290          295          300
Tyr Gly Met Val Pro Ile Gln His Leu Asp Leu Leu Val Arg Asp Ser
          305          310          315          320
Ser His Pro Asn Lys Ala Gly Gln Gly His Val Gly Asn Ile Phe Gln
          325          330          335
Arg Leu Ser Gly Arg Tyr Pro Lys Val Gln Glu Leu Leu Gln Gly Lys
          340          345          350
Arg Ala Arg Cys Cys Leu Leu Pro Ala Pro Gly Arg Arg Arg Met Asn
          355          360          365
Gln Gly His Ala Ser Pro Gly Gly Asp Thr Asp Asp Phe Arg His
          370          375          380
Leu Leu Gly Ala Tyr Val Ser Asp Val Leu Ser Ala Ala Pro Gln His

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&lt;210&gt; 5092

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&lt;210&gt; 5090

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5090

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Asp	Ser	Ser	Pro	Gly	Phe	Ser	Lys	Glu	Ile	Ala	Ala	Ala	Leu	Ala	Gly
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Val	Pro	Gly	Phe	Glu	Val	Ser	Ala	Ala	Gly	Leu	Glu	Leu	Gly	Leu	Gly
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Leu	Glu	Asp	Glu	Leu	Arg	Met	Glu	Pro	Leu	Gly	Leu	Glu	Gly	Leu	Asn
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Met	Leu	Ser	Asp	Pro	Cys	Ala	Leu	Leu	Pro	Asp	Pro	Ala	Val	Glu	Glu
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Ser	Phe	Arg	Ser	Asp	Arg	Leu	Gln								
							100								

&lt;210&gt; 5091

&lt;211&gt; 3150

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5091

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Glu Asp Asn Cys Gly Asp Leu Ser Asp Glu Asn Pro Leu Thr Cys Gly
  145      150      155      160
Arg His Ile Ala Thr Asp Phe Glu Thr Gly Leu Gly Pro Trp Asn Arg
      165      170      175
Ser Glu Gly Trp Ser Arg Asn His Arg Ala Gly Gly Pro Glu Arg Pro
      180      185      190
Ser Trp Pro Arg Arg Asp His Ser Arg Asn Ser Ala Xaa Arg Leu Val
      195      200      205
Phe Tyr Gln Tyr Leu Ser Gly Ser Glu Ala Gly Cys Leu Gln Leu Phe
  210      215      220
Leu Gln Thr Leu Gly Pro Gly Ala Pro Arg Ala Pro Val Leu Leu Arg
  225      230      235      240
Arg Arg Arg Gly Glu Leu Gly Thr Ala Trp Val Arg Asp Arg Val Asp
      245      250      255
Ile Gln Ser Ala Tyr Pro Phe Gln Ile Leu Leu Ala Gly Gln Thr Gly
      260      265      270
Pro Gly Gly Val Val Gly Leu Asp Asp Leu Ile Leu Ser Asp His Cys
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Arg Pro Val Ser Glu Val Ser Thr Leu Gln Pro Leu Pro Pro Gly Pro
  290      295      300
Arg Ala Pro Ala Pro Gln Pro Leu Pro Pro Ser Ser Arg Leu Gln Asp
  305      310      315      320
Ser Cys Lys Gln Gly His Leu Ala Cys Gly Asp Leu Cys Val Pro Pro
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Glu Gln Leu Cys Asp Phe Glu Glu Gln Cys Ala Gly Gly Glu Asp Glu
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Gln Ala Cys Gly Thr Thr Asp Phe Glu Ser Pro Glu Ala Gly Gly Trp
      355      360      365
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  370      375      380
Glu Ser Gln Gly Ser Ser Ala Ala Ala Ala Gly His Phe Leu Ser Leu
  385      390      395      400
Gln Arg Ala Trp Gly Gln Leu Gly Ala Glu Ala Arg Val Leu Thr Pro
      405      410      415
Leu Leu Gly Pro Ser Gly Pro Ser Cys Glu Leu His Leu Ala Tyr Tyr
      420      425      430
Leu Gln Ser Gln Pro Arg Ala Gly Phe Val Gly Leu Val Asp Leu Asp
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Gly Pro Asp Gln Gln Xaa Ser Trp Gly Gly Gln Arg Asp Pro Glu Gly
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Leu
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&lt;210&gt; 5089

&lt;211&gt; 793

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5089

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&lt;210&gt; 5088

&lt;211&gt; 465

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5088

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 Gln Gly Arg Ser Cys Pro Gly Thr Pro Asp Ile Ala Asp Val Ala Glu  
 35 40 45  
 Leu Arg Val Glu Leu Thr His Gly Ala Glu Thr Leu Thr Leu Trp Gln  
 50 55 60  
 Ser Thr Gly Pro Trp Xaa Pro Trp Xaa Trp Gln Glu Leu Ala Val Thr  
 65 70 75 80  
 Thr Gly Arg Ile Arg Gly Asp Phe Arg Val Thr Phe Ser Ala Thr Arg  
 85 90 95  
 Asn Ala Thr His Arg Gly Ala Val Ala Leu Asp Asp Leu Glu Phe Trp  
 100 105 110  
 Asp Cys Gly Leu Pro Thr Pro Gln Ala Asn Cys Pro Pro Gly His His

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Thr Lys Lys Ser Glu Gly Asp Gly Asp Lys Glu Glu Lys Lys Glu Asp		
245	250	255
Ser Glu Lys Glu Ala Lys Lys Ser Ser Lys Lys Arg Asn Arg Lys His		
260	265	270
Ser Gly Asp Asp Ser Phe Asp Glu Gly Ser Val Ser Glu Ser Glu Ser		
275	280	285
Glu Ser Glu Ser Gly Gln Ala Glu Glu Glu Lys Glu Glu Ala Glu Glu		
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Lys Asp Ala Ala Gly Leu Glu Cys Lys Pro Arg Pro Leu His Lys Thr		
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 2964

&lt;210&gt; 5086

&lt;211&gt; 792

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5086

Met	Ser	Thr	Ala	Leu	Thr	His	Thr	Thr	Val	Ala	Met	Arg	Cys	Pro	Met
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Leu	Xaa	Gly	Gly	Gly	Gly	Pro	Thr	Tyr	Gly	Pro	Pro	Gln	Pro	Trp	Gly
			20					25					30		
His	Pro	Asp	Val	His	Ile	Met	Gln	His	His	Val	Leu	Pro	Ile	Gln	Ala
			35				40					45			
Arg	Leu	Gly	Ser	Ile	Ala	Glu	Ile	Asp	Leu	Gly	Val	Pro	Pro	Pro	Val
			50			55					60				
Met	Lys	Thr	Phe	Lys	Glu	Phe	Leu	Leu	Ser	Leu	Asp	Asp	Ser	Val	Asp
65					70					75				80	
Glu	Thr	Glu	Ala	Val	Lys	Arg	Tyr	Asn	Asp	Tyr	Lys	Leu	Asp	Phe	Arg
			85					90					95		
Arg	Gln	Gln	Met	Gln	Asp	Phe	Phe	Leu	Ala	His	Lys	Asp	Glu	Glu	Trp
			100					105					110		
Phe	Arg	Ser	Lys	Tyr	His	Pro	Asp	Glu	Val	Gly	Lys	Arg	Arg	Gln	Glu
			115				120					125			
Ala	Arg	Gly	Ala	Leu	Gln	Asn	Arg	Leu	Arg	Val	Phe	Leu	Ser	Leu	Met
			130			135					140				
Glu	Thr	Gly	Trp	Phe	Asp	Asn	Leu	Leu	Leu	Asp	Ile	Asp	Lys	Ala	Asp
145					150					155				160	
Ala	Ile	Val	Lys	Met	Leu	Asp	Ala	Ala	Val	Ile	Lys	Met	Glu	Gly	Gly
			165					170					175		
Thr	Glu	Asn	Asp	Leu	Arg	Ile	Leu	Glu	Gln	Glu	Glu	Glu	Glu	Gln	
			180				185						190		
Ala	Gly	Lys	Pro	Gly	Glu	Pro	Ser	Lys	Lys	Glu	Glu	Gly	Arg	Ala	Gly

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2340

210	215	220
Thr Pro Lys Cys Glu Asp Cys Gln Ser Leu Val Lys Pro Asp Ile Val		
225	230	235
Phe Phe Gly Glu Ser Leu Pro Ala Arg Phe Phe Ser Cys Met Gln Ser		240
	245	250
Asp Phe Leu Lys Val Asp Leu Leu Leu Val Met Gly Thr Ser Leu Gln		255
	260	265
Val Gln Pro Phe Ala Ser Leu Ile Ser Lys Ala Pro Leu Ser Thr Pro		270
	275	280
Arg Leu Leu Ile Asn Lys Glu Lys Ala Gly Gln Ser Asp Pro Phe Leu		285
	290	295
Gly Met Ile Met Gly Leu Gly Gly Gly Met Asp Phe Asp Ser Lys Lys		300
305	310	315
Ala Tyr Arg Asp Val Ala Trp Leu Gly Glu Cys Asp Gln Gly Cys Leu		320
	325	330
Ala Leu Ala Glu Leu Leu Gly Trp Lys Lys Glu Leu Glu Asp Leu Val		335
	340	345
Arg Arg Glu His Ala Ser Ile Asp Ala Gln Ser Gly Ala Gly Val Pro		350
	355	360
Asn Pro Ser Thr Ser Ala Ser Pro Lys Lys Ser Pro Pro Pro Ala Lys		365
	370	375
Asp Glu Ala Arg Thr Thr Glu Arg Glu Lys Pro Gln		380
385	390	395

&lt;210&gt; 5085

&lt;211&gt; 2964

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5085

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 600  
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 660  
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 720

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 1380  
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 1440  
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 1856

&lt;210&gt; 5084

&lt;211&gt; 396

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5084

Arg	Asp	Thr	Val	Val	Gly	Asp	Gly	Thr	Glu	Arg	Ser	Val	Thr	Ala	Ser
1				5					10					15	
Arg	Ala	Ser	Ala	Pro	Arg	Pro	Trp	Gln	Ser	Gln	Thr	Asp	Ser	Asp	Ser
			20					25					30		
Asp	Ser	Glu	Gly	Gly	Ala	Ala	Gly	Gly	Glu	Ala	Asp	Met	Asp	Phe	Leu
		35					40					45			
Arg	Asn	Leu	Phe	Ser	Gln	Thr	Leu	Ser	Leu	Gly	Ser	Gln	Lys	Glu	Arg
	50					55					60				
Leu	Leu	Asp	Glu	Leu	Thr	Leu	Glu	Gly	Val	Ala	Arg	Tyr	Met	Gln	Ser
65					70				75					80	
Glu	Arg	Cys	Arg	Arg	Val	Ile	Cys	Leu	Val	Gly	Ala	Gly	Ile	Ser	Thr
			85					90						95	
Ser	Ala	Gly	Ile	Pro	Asp	Phe	Arg	Ser	Pro	Ser	Thr	Gly	Leu	Tyr	Asp
			100					105					110		
Asn	Leu	Glu	Lys	Tyr	His	Leu	Pro	Tyr	Pro	Glu	Ala	Ile	Phe	Glu	Ile
		115					120					125			
Ser	Tyr	Phe	Lys	Lys	His	Pro	Glu	Pro	Phe	Phe	Ala	Leu	Ala	Lys	Glu
	130					135					140				
Leu	Tyr	Pro	Gly	Gln	Phe	Lys	Pro	Thr	Ile	Cys	His	Tyr	Phe	Met	Arg
145					150					155				160	
Leu	Leu	Lys	Asp	Lys	Gly	Leu	Leu	Leu	Arg	Cys	Tyr	Thr	Gln	Asn	Ile
			165					170						175	
Asp	Thr	Leu	Glu	Arg	Ile	Ala	Gly	Leu	Glu	Gln	Glu	Asp	Leu	Val	Glu
		180						185					190		
Ala	His	Gly	Thr	Phe	Tyr	Thr	Ser	His	Cys	Val	Ser	Ala	Ser	Cys	Arg
		195					200					205			
His	Glu	Tyr	Pro	Leu	Ser	Trp	Met	Lys	Glu	Lys	Ile	Phe	Ser	Glu	Val

65		70		75		80									
Trp	Gly	Asn	Asn	Asn	Glu	Ile	Leu	Ser	Gly	Leu	Asp	Met	Glu	Glu	Gly
			85					90					95		
Lys	Glu	Gly	Gly	Thr	Trp	Leu	Gly	Ile	Ser	Thr	Arg	Gly	Lys	Leu	
		100					105						110		

&lt;210&gt; 5083

&lt;211&gt; 1856

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5083

```

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60
acagtgggtg gtgacgggac agagcgggac gtgacagcct caagggcttc agcaccgcgc
120
ccatggcaga gccagaccga ctcagattca gactctgagg gaggagccgc tgggtggagaa
180
gcagacatgg acttcctgcg gaacttattc tccagacgc tcagcctggg cagccagaag
240
gagcgtctgc tggacgagct gaccttggaa ggggtggccc ggtacatgca gagcgaacgc
300
tgtcgcagag tcatctgttt ggtgggagct ggaatctcca catccgcagg catccccgac
360
tttcgtcttc catccaccgg cctctatgac aacctagaga agtaccatct tccctaccca
420
gagcccatct ttgagatcag ctatttcaag aaacatccgg aacccttctt cgccctcgcc
480
aaggaactct atcctgggca gttcaagcca accatctgtc actacttcat gcgcctgctg
540
aaggacaagg ggctactcct gcgctgtac acgcagaaca tagataccct ggagcgaata
600
gccgggctgg aacaggagga cttgggtggag gcgcacggca ctttctacac atcacactgc
660
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1260

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      85              90              95
Tyr Asp Lys Val Ser Gly Asp Met Gln Lys Gln Gly Cys Asp Cys Glu
      100              105              110
Cys Leu Gly Gly Gly Arg Ile Ser His Gln Ser Gln Asp Lys Lys Ile
      115              120              125
His Val Tyr Gly Tyr Ser Met Val Ser Arg Ser Pro Val Pro Pro Cys
      130              135              140
Arg Arg Pro Gln Tyr Gln Leu Arg Gly Pro Pro Glu Pro Ala Ala Leu
      145              150              155              160
Thr Arg Gly Pro Ser
      165

```

&lt;210&gt; 5081

&lt;211&gt; 561

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5081

```

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420
gccaacaggg atgaattcta cagccgaccc tccaagttag ctgacttctg ggggaacaac
480
aacgatatcc tcagtgggct ggacatggag gaaggcaagg aaggaggcac atggctgggc
540
atcagcacac gtggcaagct g
561

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&lt;210&gt; 5082

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5082

```

Met Pro Pro Lys Leu Leu Cys Ala Gly Arg Cys Val Gly Gln Asp Gly
  1              5              10              15
Ala Ala Gln Ala Trp His Cys Pro Pro Gly Gln Gly His Ser Val Trp
      20              25              30
Asp Ala Val Arg Met Pro Leu Gly Ala Gly Thr Pro Val Asn Val Gln
      35              40              45
Arg Arg Glu Asp Ser Ala Thr Glu Gly Ser His Arg Leu Ile Leu Ala
      50              55              60
Ala Asn Arg Asp Glu Phe Tyr Ser Arg Pro Ser Lys Leu Ala Asp Phe

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 420  
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 1320  
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 1338

&lt;210&gt; 5080

&lt;211&gt; 165

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5080

Gly Ala Gly Pro Trp Glu Ala Phe Pro Asp Gly Ile Gly Arg Arg Ser  
 1 5 10 15  
 Arg Arg Ala Arg Leu Pro Gln Tyr Lys Arg Pro Pro Gly Arg Val Gly  
 20 25 30  
 Gly Gly Asp Ser Gly Arg Arg Asn Met Ala Val Ala Asp Leu Ala Leu  
 35 40 45  
 Ile Pro Asp Val Asp Ile Asp Ser Asp Gly Val Phe Lys Tyr Val Leu  
 50 55 60  
 Ile Arg Val His Ser Ala Pro Arg Ser Gly Ala Pro Ala Ala Glu Ser  
 65 70 75 80  
 Lys Glu Ile Val Arg Gly Tyr Lys Trp Ala Glu Tyr His Ala Asp Ile

260 265 270  
 Ala Glu Met Asp Lys Val Lys Glu Glu Ala Met Glu Ile Leu Thr Ala  
 275 280 285  
 Arg Gln Lys Lys Ala Glu Glu Leu Lys Arg Leu Thr Asp Leu Ala Ser  
 290 295 300  
 Gln Met Ala Glu Met Gln Leu Ala Glu Leu Arg Ala Glu Ile Lys His  
 305 310 315 320  
 Phe Val Ser Glu Arg Lys Tyr Asp Glu Glu Leu Gly Lys Ala Ala Arg  
 325 330 335  
 Phe Ser Cys Asp Ile Glu Gln Leu Lys Ala Gln Ile Met Leu Cys Gly  
 340 345 350  
 Glu Ile Thr His Pro Lys Asn Asn Tyr Ser Ser Arg Thr Pro Cys Ser  
 355 360 365  
 Ser Leu Leu Pro Leu Leu Asn Ala His Ala Ala Thr Ser Gly Lys Gln  
 370 375 380  
 Ser Asn Phe Ser Arg Lys Ser Ser Thr His Asn Lys Pro Ser Glu Gly  
 385 390 395 400  
 Lys Ala Ala Asn Pro Lys Met Val Ser Ser Leu Pro Ser Thr Ala Asp  
 405 410 415  
 Pro Ser His Gln Thr Met Pro Ala Asn Lys Gln Asn Gly Ser Ser Asn  
 420 425 430  
 Gln Arg Arg Arg Phe Asn Pro Gln Tyr His Asn Asn Arg Leu Asn Gly  
 435 440 445  
 Pro Ala Lys Ser Gln Gly Ser Gly Asn Glu Ala Glu Pro Leu Gly Lys  
 450 455 460  
 Gly Asn Ser Arg His Glu His Arg Arg Gln Pro His Asn Gly Phe Arg  
 465 470 475 480  
 Pro Lys Asn Lys Gly Gly Ala Lys Asn Gln Glu Ala Ser Leu Gly Met  
 485 490 495  
 Lys Thr Pro Glu Ala Pro Ala His Ser Glu Lys Pro Arg Arg Gln  
 500 505 510  
 His Ala Ala Asp Thr Ser Glu Ala Arg Pro Phe Arg Gly Ser Val Gly  
 515 520 525  
 Arg Val Ser Gln Cys Asn Leu Cys Pro Thr Arg Ile Glu Val Ser Thr  
 530 535 540  
 Asp Ala Ala Val Leu Ser Val Pro Ala Val Thr Leu Val Ala  
 545 550 555

&lt;210&gt; 5079

&lt;211&gt; 1338

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5079

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 2340  
 cgcctcctct gc  
 2352

<210> 5078

<211> 558

<212> PRT

<213> Homo sapiens

<400> 5078

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Val	Arg	Ser	Val	Val	Pro	Asn	Lys	Ser	Asn	Asn	Glu	Ile	Val	Leu	Val	20	25	30	
Leu	Gln	Gln	Phe	Asp	Phe	Asn	Val	Asp	Lys	Ala	Val	Gln	Ala	Phe	Val	35	40	45	
Asp	Gly	Ser	Ala	Ile	Gln	Val	Leu	Lys	Glu	Trp	Asn	Met	Thr	Gly	Lys	50	55	60	
Lys	Lys	Asn	Asn	Lys	Arg	Lys	Arg	Ser	Lys	Ser	Lys	Gln	His	Gln	Gly	65	70	75	80
Asn	Lys	Asp	Ala	Lys	Asp	Lys	Val	Glu	Arg	Pro	Glu	Ala	Gly	Pro	Leu	85	90	95	
Gln	Pro	Gln	Pro	Pro	Gln	Ile	Gln	Asn	Gly	Pro	Met	Asn	Gly	Cys	Glu	100	105	110	
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<212> PRT

<213> Homo sapiens

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<211> 240

<212> PRT

<213> Homo sapiens

<400> 5074

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<213> Homo sapiens

<400> 5075

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&lt;211&gt; 1712

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&lt;213&gt; Homo sapiens

&lt;400&gt; 5073

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&lt;210&gt; 5072

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5072

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&lt;211&gt; 255

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5070

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2640  
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2700  
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2760  
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2820  
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 180  
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 240  
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 360  
 cgccgttacc gagagaggcg ctacgggttc accaggagat actaccggtc tccttcgctg  
 420  
 taccggttccc ggtcccgtag caggtcgcgc tctcggggaa ggtcgtactg cggaagggcg  
 480  
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 540  
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 660  
 atgagtaggc tagggaacca acgttgctgt gtagtttcaa tattagtacc tttagtccc  
 720  
 gaaatctttt tggaggaaag agggaggaca ttacctgtat ttaagtggac agcattctct  
 780  
 ttagggttaa aggtcaactg gaagttaa at ggctcaggat gtagggaact ttttttccta  
 840  
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 960  
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 1020  
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 1260  
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 1320

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 1380  
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 1440  
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 1860  
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 1920  
 acaataggaa acaccacttc cacaagtctc aagcctcagt gctaaagtac tactgaaaag  
 1980  
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 2023

&lt;210&gt; 5068

&lt;211&gt; 179

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5068

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Ser	Leu	Arg	Arg	Ala	Leu	Leu	Glu	Gln	Lys	Ile	Glu	Glu	Glu	Met	Leu
			20					25					30		
Ala	Leu	Gln	Asn	Glu	Arg	Thr	Glu	Arg	Ile	Arg	Ser	Leu	Leu	Glu	Arg
			35					40					45		
Gln	Ala	Arg	Glu	Ile	Glu	Ala	Phe	Asp	Ser	Glu	Ser	Met	Arg	Leu	Gly
			50				55					60			
Phe	Ser	Asn	Met	Val	Leu	Ser	Asn	Leu	Ser	Pro	Glu	Ala	Phe	Ser	His
65				70						75				80	
Ser	Tyr	Pro	Gly	Ala	Ser	Gly	Trp	Ser	His	Asn	Pro	Thr	Gly	Gly	Pro
			85						90					95	
Gly	Pro	His	Trp	Gly	His	Pro	Met	Gly	Gly	Pro	Pro	Gln	Ala	Trp	Gly
			100					105					110		
His	Pro	Met	Gln	Gly	Gly	Pro	Gln	Pro	Trp	Gly	His	Pro	Ser	Gly	Pro
			115					120					125		
Met	Gln	Gly	Val	Pro	Arg	Gly	Ser	Ser	Met	Gly	Val	Arg	Asn	Ser	Pro
			130				135					140			
Gln	Ala	Leu	Arg	Arg	Thr	Ala	Ser	Gly	Gly	Arg	Thr	Glu	Gln	Gly	Met
145				150						155				160	
Ser	Arg	Ser	Thr	Ser	Val	Thr	Ser	Gln	Ile	Ser	Asn	Gly	Ser	His	Met

85 90 95  
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 115 120

<210> 5067  
 <211> 2023  
 <212> DNA  
 <213> Homo sapiens

<400> 5067  
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 180  
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 540  
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 catcatcaca gcagcctcct cacttgggta ctacagtgtg gaagctgagt gcatatggta  
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 720  
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 780  
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 840  
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 960  
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 1020  
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 1080  
 tgatctgact tctcagcctc atttggacta aaaaaagaaa gcagaaatcc atgaacacat  
 1140  
 tgcttctcgg ccttttggct aagatcaagt gtagaaatcc atgaacacta aaggacttca  
 1200  
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 1260

&lt;400&gt; 5064

```

Met Asp Arg Leu Glu Arg Pro Leu Val Asp Leu Pro Leu Leu Leu Asp
 1          5          10          15
Pro Pro Ser Tyr Val Pro Asp Thr Val Asp Leu Thr Asp Asp Ala Leu
 20          25          30
Ala Arg Lys Tyr Trp Leu Thr Cys Phe Glu Glu Ala Leu Asp Gly Val
 35          40          45
Val Lys Arg Ala Val Ala Ser Gln Pro Asp Ser Val Asp Ala Ala Glu
 50          55          60
Arg Ala Glu Lys Phe Arg Gln Lys Tyr Trp Asn Lys Leu Gln Thr Leu
 65          70          75          80
Arg Gln Gln Pro Phe Ala Tyr Gly Thr Leu Thr Val Arg Ser Leu Leu
 85          90          95
Asp Thr Arg Glu His Cys Leu Asn Glu Phe Asn Phe Pro Asp
 100          105          110

```

&lt;210&gt; 5065

&lt;211&gt; 370

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5065

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120
gagaaaaaca agatggaacc ccggaacctg gccctgggtct ttgggcccgc actggtgagg
180
acgtctgagg acaacatgac agacatggtg acccacatgc ctgaccgcta caagatcgtg
240
gagacactga tccagcactc agactgggtc ttcatgtgacg aagaggacaa gggagagaga
300
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360
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370

```

&lt;210&gt; 5066

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5066

```

Ile Glu Asp Ala Arg Glu Arg Met Arg Thr Leu Arg Lys Leu Ile Arg
 1          5          10          15
Asp Leu Pro Gly His Tyr Tyr Glu Thr Leu Lys Phe Leu Val Gly His
 20          25          30
Leu Lys Thr Ile Ala Asp His Ser Glu Lys Asn Lys Met Glu Pro Arg
 35          40          45
Asn Leu Ala Leu Val Phe Gly Pro Thr Leu Val Arg Thr Ser Glu Asp
 50          55          60
Asn Met Thr Asp Met Val Thr His Met Pro Asp Arg Tyr Lys Ile Val
 65          70          75          80
Glu Thr Leu Ile Gln His Ser Asp Trp Phe Phe Ser Asp Glu Glu Asp

```

<213> Homo sapiens

<400> 5062

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Met Ala Gly Trp Gly Leu Val Asp Val Ser Gly Ala Pro Glu Pro Trp
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Arg Ile Pro His Gly Ile Pro Leu Pro Ala Leu Ser Gly Leu Cys Gly
      20           25           30
Val Arg Arg Ser Pro Ser Ser Arg Phe Ser Phe Phe Pro Gln Gln
      35           40           45
Arg Asn Trp Arg Lys Asp Ile Lys Leu Ser Ala Val Asp Leu Ser Ala
 50           55           60
Glu Ile Phe Pro Glu Ser Met Val Val Leu Asn Tyr Leu His Val Ser
65           70           75           80
Ser Ile Phe Asn Ser Gly Val Gly Leu Phe Leu Ile Ser Ser Gln Lys
      85           90           95
Cys Ser Ala Leu Gly Glu Gly Thr Ser Pro Leu Ala Cys His Phe Pro
      100           105           110
Gly Val Leu Tyr His Phe Asp Gly Thr Leu Trp Ser Ala Glu Asn Ala
      115           120           125
Leu Ser Trp His Ala Ser Arg Leu
      130           135

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<210> 5063

<211> 561

<212> DNA

<213> Homo sapiens

<400> 5063

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120
tctcccttct tagagagaga gtggaagctt ctgagtgtgg cttgggtcgt tctgaaccat
180
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240
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300
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420
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561

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<210> 5064

<211> 110

<212> PRT

<213> Homo sapiens

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1140  
ctctctgcta agtaaataca tgaccattca ttgagaactg atggggaccc agcgtgtggc  
1200  
ccaatgagtg gcagtttttt cctagccagc ttctgtggcc aaatttggag gattttccaa  
1260  
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1320  
cttctgaaa cactcagagc tgacttcttc cttctttcta atcaacaaag acaaaactcc  
1380  
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1440  
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1500  
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1560  
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1680  
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1740  
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1980  
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2100  
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2160  
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2220  
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2280  
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2340  
cattttggag cctgggatga ctgcctagga cacttatgct agacctgtta atgccagtg  
2400  
gaaatttcca actaaatact taataaaata attacaaaaa gaaaaaaaaa tgacacattg  
2460  
ca  
2462

&lt;210&gt; 5062

&lt;211&gt; 136

&lt;212&gt; PRT

[illegible]

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<210> 5061
<211> 2462
<212> DNA
<213> Homo sapiens
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120
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180
gataaaggac acctggaaag tggcaggcca aggggctggg cccttcccca agggcactgc
240
atttttgtga tgagattaaa aacaaaccaa ctccactatt aaaaatgcta gaaacatgga
300
gatagtttag caccaccatt gattctggaa atatttcagc actcaaactg actgcactga
360
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420
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480
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gctcacgctt cagggattac tgaagtctgc cttgcccggt agtcacttcc tgcagacctc
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780
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840
accaccacag gtgtcagaga tacttgagaa tgactggtac caacaagacg acaaaggagg
900
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960
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1020

```

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5058

```

Met Val Ser Ile Pro Glu Tyr Tyr Glu Gly Lys Asn Val Leu Leu Thr
 1             5             10             15
Gly Ala Thr Gly Phe Leu Gly Lys Val Leu Leu Glu Lys Leu Leu Arg
          20             25             30
Ser Cys Pro Lys Val Asn Ser Val Tyr Val Leu Val Arg Gln Lys Ala
          35             40             45
Gly Gln Thr Pro Gln Glu Arg Val Glu Glu Val Leu Ser Gly Lys Leu
          50             55             60
Phe Asp Arg Leu Arg Asp Glu Asn Pro Asp Phe Arg Glu Lys Ile Ile
65             70             75             80
Ala Ile Asn Ser Glu Leu Thr Gln Pro Lys Leu Ala Leu Ser Glu Glu
          85             90             95
Asp Lys Glu Val Ile Ile Asp Ser Thr Asn Ile Ile Phe His Cys Ala
          100            105            110
Ala Thr Val Arg Phe Asn Glu Asn Leu Arg
          115            120

```

&lt;210&gt; 5059

&lt;211&gt; 480

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5059

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aactgcccga gctgactgag acggacgttc aggacagaga gcgtgaatgc atagtgcac
120
cagctgtgag tctttctcca gggacagtcg gcagccggcc ctaggtgcag agccgatgac
180
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300
cagagagatg gggaggagag ggagcaggag gggactggcc atctctgaga cagaagcgtg
360
agtagtgggt ggacttgagg gcaggagagg actgaaaggg cagaggcctg ggcgatgcag
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480

```

&lt;210&gt; 5060

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5060

```

Met Ala Ser Pro Leu Leu Leu Pro Leu Leu Pro Ile Ser Leu Pro Ala
 1             5             10             15
Phe Ala Ser Trp Leu Ser Leu Asp Ile Met Thr Gly Gly Leu Ala Pro

```

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Phe	Asn	Ile	His	Ser	Trp	Glu	Lys	Lys	Tyr	Pro	Cys	Arg	Tyr	Cys	Glu
	515						520				525				
Lys	Val	Phe	Pro	Leu	Ala	Glu	Tyr	Arg	Thr	Lys	His	Glu	Ile	His	His
	530						535				540				
Thr	Gly	Glu	Arg	Arg	Tyr	Gln	Cys	Leu	Ala	Cys	Gly	Lys	Ser	Phe	Ile
545					550					555					560
Asn	Tyr	Gln	Phe	Met	Ser	Ser	His	Ile	Lys	Ser	Val	His	Ser	Gln	Asp
				565					570					575	
Pro	Ser	Gly	Asp	Ser	Lys	Leu	Tyr	Arg	Leu	His	Pro	Cys	Arg	Ser	Leu
			580					585					590		
Gln	Ile	Arg	Gln	Tyr	Ala	Tyr	His	Ser	Asp	Arg	Ser	Ser	Thr	Ile	Pro
	595						600					605			
Ala	Met	Lys	Asp	Asp	Gly	Ile	Gly	Tyr	Lys	Val	Asp	Thr	Gly	Lys	Glu
	610						615				620				
Pro	Pro	Val	Gly	Thr	Thr	Thr	Ser	Thr	Gln	Asn	Lys	Pro	Met	Thr	Trp
625					630					635					640
Glu	Asp	Ile	Phe	Ile	Gln	Gln	Glu	Asn	Asp	Ser	Ile	Phe	Lys	Gln	Asn
				645					650					655	
Val	Thr	Asp	Gly	Ser	Thr	Glu	Phe	Glu	Phe	Ile	Ile	Pro	Glu	Ser	Tyr
			660					665					670		

&lt;210&gt; 5057

&lt;211&gt; 673

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5057

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120
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180
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240
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300
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360
aaagagggtga tcatagattc taccaatatt atattccact gtgcagctac agtaaggttt
420
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480
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540
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660
tttaaacatg cat
673

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&lt;210&gt; 5058

```

65      70      75      80
Ile Leu Asn Tyr Ile Tyr Ser Ser Lys Ile Val Arg Val Arg Ser Asp
      85      90      95
Leu Leu Asp Glu Leu Ile Lys Ser Gly Gln Leu Leu Gly Val Lys Phe
      100      105      110
Ile Ala Glu Leu Gly Val Pro Leu Ser Gln Val Lys Ser Ile Ser Gly
      115      120      125
Thr Ala Gln Asp Gly Asn Thr Glu Pro Leu Pro Pro Asp Ser Gly Asp
      130      135      140
Lys Asn Leu Val Ile Gln Lys Ser Lys Asp Glu Ala Gln Asp Asn Gly
      145      150      155      160
Ala Thr Ile Met Pro Ile Ile Thr Glu Ser Phe Ser Leu Ser Ala Glu
      165      170      175
Asp Tyr Glu Met Lys Lys Ile Ile Val Thr Asp Ser Asp Asp Asp
      180      185      190
Asp Asp Val Ile Phe Cys Ser Glu Ile Leu Pro Thr Lys Glu Thr Leu
      195      200      205
Pro Ser Asn Asn Thr Val Ala Gln Val Gln Ser Asn Pro Gly Pro Val
      210      215      220
Ala Ile Ser Asp Val Ala Pro Ser Ala Ser Asn Asn Ser Pro Pro Leu
      225      230      235      240
Thr Asn Ile Thr Pro Thr Gln Lys Leu Pro Thr Pro Val Asn Gln Ala
      245      250      255
Thr Leu Ser Gln Thr Gln Gly Ser Glu Lys Leu Leu Val Ser Ser Ala
      260      265      270
Pro Thr His Leu Thr Pro Asn Ile Ile Leu Leu Asn Gln Thr Pro Leu
      275      280      285
Ser Thr Pro Pro Asn Val Ser Ser Ser Leu Pro Asn His Met Pro Ser
      290      295      300
Ser Ile Asn Leu Leu Val Gln Asn Gln Gln Thr Pro Asn Ser Ala Ile
      305      310      315      320
Leu Thr Gly Asn Lys Ala Asn Glu Glu Glu Glu Glu Ile Ile Asp
      325      330      335
Asp Asp Asp Asp Thr Ile Ser Ser Ser Pro Asp Ser Ala Val Ser Asn
      340      345      350
Thr Ser Leu Val Pro Gln Ala Asp Thr Ser Gln Asn Thr Ser Phe Asp
      355      360      365
Gly Ser Leu Ile Gln Lys Met Gln Ile Pro Thr Leu Leu Gln Glu Pro
      370      375      380
Leu Ser Asn Ser Leu Lys Ile Ser Asp Ile Ile Thr Arg Asn Thr Asn
      385      390      395      400
Asp Pro Gly Val Gly Ser Lys His Leu Met Glu Gly Gln Lys Ile Ile
      405      410      415
Thr Leu Asp Thr Ala Thr Glu Ile Glu Gly Leu Ser Thr Gly Cys Lys
      420      425      430
Val Tyr Ala Asn Ile Gly Glu Asp Thr Tyr Asp Ile Val Ile Pro Val
      435      440      445
Lys Asp Asp Pro Asp Glu Gly Glu Ala Arg Leu Glu Asn Glu Ile Pro
      450      455      460
Lys Thr Ser Gly Ser Glu Met Ala Asn Lys Arg Met Lys Val Lys His
      465      470      475      480
Asp Asp His Tyr Glu Leu Ile Val Asp Gly Arg Val Tyr Tyr Ile Cys
      485      490      495
Ile Val Cys Lys Arg Ser Tyr Val Cys Leu Thr Ser Leu Arg Arg His

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&lt;210&gt; 5056

&lt;211&gt; 672

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5056

Met	Glu	Ser	Arg	Lys	Leu	Ile	Ser	Ala	Thr	Asp	Ile	Gln	Tyr	Ser	Gly
1				5				10					15		
Ser	Leu	Leu	Asn	Ser	Leu	Asn	Glu	Gln	Arg	Gly	His	Gly	Leu	Phe	Cys
			20					25					30		
Asp	Val	Thr	Val	Ile	Val	Glu	Asp	Arg	Lys	Phe	Arg	Ala	His	Lys	Asn
			35					40					45		
Ile	Leu	Ser	Ala	Ser	Ser	Thr	Tyr	Phe	His	Gln	Leu	Phe	Ser	Val	Ala
			50					55					60		
Gly	Gln	Val	Val	Glu	Leu	Ser	Phe	Ile	Arg	Ala	Glu	Ile	Phe	Ala	Glu

145

150

155

&lt;210&gt; 5055

&lt;211&gt; 2520

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5055

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 780  
 a  
 781

&lt;210&gt; 5054

&lt;211&gt; 156

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5054

Glu	Thr	Ser	Asn	Ala	Ser	Ala	Ala	Pro	Ala	Val	Glu	Arg	Gly	Asp	Ser
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Val	Gly	Pro	Cys	Pro	Lys	Met	Ser	Pro	Leu	Arg	Pro	Leu	Leu	Leu	Ala
		20					25					30			
Leu	Ala	Leu	Ala	Ser	Val	Pro	Cys	Ala	Gln	Gly	Ala	Cys	Pro	Ala	Ser
	35					40					45				
Ala	Asp	Leu	Lys	His	Ser	Asp	Gly	Thr	Arg	Thr	Cys	Ala	Lys	Leu	Tyr
	50				55					60					
Asp	Lys	Ser	Asp	Pro	Tyr	Tyr	Glu	Asn	Cys	Cys	Gly	Gly	Ala	Glu	Leu
65					70				75					80	
Ser	Leu	Glu	Ser	Gly	Ala	Asp	Leu	Pro	Tyr	Leu	Pro	Ser	Asn	Trp	Ala
			85				90						95		
Asn	Thr	Ala	Ser	Ser	Leu	Val	Val	Ala	Pro	Arg	Cys	Glu	Leu	Thr	Val
		100					105					110			
Trp	Ser	Arg	Gln	Gly	Lys	Ala	Gly	Lys	Thr	His	Lys	Phe	Ser	Ala	Gly
	115						120					125			
Thr	Tyr	Pro	Arg	Leu	Glu	Glu	Tyr	Arg	Arg	Gly	Ile	Leu	Gly	Asp	Trp
	130				135						140				
Ser	Asn	Ala	Ile	Ser	Ala	Leu	Tyr	Cys	Arg	Cys	Ser				

65					70					75					80
Lys	Ile	Tyr	Trp	Phe	Lys	Asp	Gly	Lys	Gln	Ile	Ser	Pro	Lys	Ser	Asp
				85					90					95	
His	Tyr	Thr	Ile	Gln	Arg	Asp	Leu	Asp	Gly	Thr	Cys	Ser	Leu	His	Thr
			100					105					110		
Thr	Ala	Ser	Thr	Leu	Asp	Asp	Asp	Gly	Asn	Tyr	Thr	Ile	Met	Ala	Ala
			115				120					125			
Asn	Pro	Gln	Gly	Arg	Ile	Ser	Cys	Thr	Gly	Arg	Leu	Met	Val	Gln	Ala
			130				135				140				
Val	Asn	Gln	Arg	Gly	Arg	Ser	Pro	Arg	Ser	Pro	Ser	Gly	His	Pro	His
145					150				155					160	
Val	Arg	Arg	Pro	Arg	Ser	Arg	Ser	Arg	Asp	Ser	Gly	Asp	Glu	Asn	Glu
				165				170					175		
Pro	Ile	Gln	Glu	Arg	Phe	Phe	Arg	Pro	His	Phe	Leu	Gln	Ala	Pro	Gly
			180					185				190			
Asp	Leu	Thr	Val	Gln	Glu	Gly	Lys	Leu	Cys	Arg	Met	Asp	Cys	Lys	Val
			195				200					205			
Ser	Gly	Leu	Pro	Thr	Pro	Asp	Leu	Ser	Trp	Gln	Leu	Asp	Gly	Lys	Pro
			210			215					220				
Val	Arg	Pro	Asp	Ser	Ala	His	Lys	Met	Leu	Val	Arg	Glu	Asn	Gly	Val
225					230				235					240	
His	Ser	Leu	Ile	Ile	Glu	Pro	Val	Thr	Ser	Arg	Asp	Ala	Gly	Ile	Tyr
			245					250					255		
Thr	Cys	Ile	Ala	Thr	Asn	Arg	Ala	Gly	Gln	Asn	Ser	Phe	Ser	Leu	Glu
			260					265				270			
Leu	Val	Val	Ala	Ala	Lys	Glu	Ala	His	Lys	Pro	Pro	Val	Phe	Ile	Glu
			275				280					285			
Lys	Leu	Gln	Asn	Thr	Gly	Val	Ala	Asp	Gly	Tyr	Pro	Val	Arg	Leu	Glu
			290			295					300				
Cys	Arg	Val	Leu	Gly	Val	Pro	Pro	Pro	Gln	Ile	Phe	Trp	Lys	Lys	Glu
305				310					315					320	
Asn	Glu	Ser	Leu	Thr	His	Ser	Thr	Asp	Arg	Val	Ser	Met	His	Gln	Asp
			325					330					335		
Asn	His	Gly	Tyr	Ile	Cys	Leu	Leu	Ile	Gln	Gly	Ala	Thr	Lys	Glu	Asp
			340					345				350			
Ala	Gly	Trp	Tyr	Thr	Val	Ser	Ala	Lys	Asn	Glu	Ala	Gly	Ile	Val	Ser
			355				360					365			
Cys	Thr	Ala	Arg	Leu	Asp	Val	Tyr	Thr	Gln	Trp	His	Gln	Gln	Ser	Gln
			370			375					380				
Ser	Thr	Lys	Pro	Lys	Lys	Val	Arg	Pro	Ser	Ala	Ser	Arg	Tyr	Ala	Ala
385				390					395					400	
Leu	Ser	Asp	Gln	Gly	Leu	Asp	Ile	Lys	Ala	Ala	Phe	Gln	Pro	Glu	Ala
			405					410					415		
Asn	Pro	Ser	His	Leu	Thr	Leu	Asn	Thr	Ala	Leu	Val	Glu	Ser	Glu	Asp
			420				425					430			
Leu															

&lt;210&gt; 5053

&lt;211&gt; 781

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5053

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&lt;210&gt; 5052

&lt;211&gt; 433

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5052

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 Arg Leu Ile Ser Glu Ile Glu Tyr Arg Leu Glu Arg Ser Pro Val Asp  
 20 25 30  
 Glu Ser Gly Asp Glu Phe Thr Tyr Gly Asp Val Pro Val Glu Asn Gly  
 35 40 45  
 Met Ala Pro Phe Phe Glu Met Lys Leu Lys His Tyr Lys Ile Phe Glu  
 50 55 60  
 Gly Met Pro Val Thr Phe Thr Cys Arg Val Ala Gly Asn Pro Lys Pro

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610

615

&lt;210&gt; 5051

&lt;211&gt; 4125

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5051

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1260  
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1380

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180      185      190
Ile Ile Leu Tyr Asp Ala Val Thr Glu Lys Leu Thr Arg Arg Glu Val
195      200      205
Glu Ala Lys Phe Cys Asn Leu Ser Val Ser Ser Asn Ser Xaa Val Ser
210      215      220
Thr Leu Gln Xaa Leu Leu Asn Arg Arg Glu Ile Xaa Ala Arg Ser Tyr
225      230      235      240
Ala Asn Asn Xaa Asn Ser Leu Ile Lys Gln Lys Thr Gly Ile Ala Gln
245      250      255
Leu Val Lys Tyr Gly Leu Lys Asp Leu Glu Glu Val Val Gly Leu Leu
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&lt;211&gt; 429

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5048

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 Ala Ser Arg Gln Glu Ser Thr Thr Asp His Met Asp Ser Met Leu Leu  
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 Lys Gln Met Glu Glu Leu Gln Ala Leu Lys Val Lys Leu Glu Met Lys  
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&lt;211&gt; 462

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5045

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&lt;210&gt; 5044

&lt;211&gt; 273

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5044

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&lt;210&gt; 5043

&lt;211&gt; 1824

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5043

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Trp Asn Gln Val Gly Met Gly Asn Ala Asp Tyr Val Ala Ala Phe Leu			
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&lt;211&gt; 686

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5042

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&lt;210&gt; 5041

&lt;211&gt; 2461

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5041

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<211> 616

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<213> Homo sapiens

<400> 5040

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&lt;210&gt; 5039

&lt;211&gt; 3059

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5039

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Gly	Glu	Leu	Leu	Ala	Gln	Tyr	Met	Ala	Asp	Ala	Ala	Ser	Glu	Leu
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Pro	Thr	Thr	Pro	Tyr	Gly	Lys	Thr	Leu	Ile	Lys	Val	Ala	Glu	Ala
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Ile	Ser	Lys	Glu	Ser	Arg	Leu	Leu	Gln	Asn	Arg	Arg	Leu	Asp	Leu
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			195				200					205		
Ala	Gln	Thr	Glu	Phe	Asp	Arg	Gln	Ala	Glu	Val	Thr	Arg	Leu	Leu
	210					215					220			
Glu	Gly	Ile	Ser	Ser	Thr	His	Val	Asn	His	Leu	Arg	Cys	Leu	His
225					230					235				240
Phe	Val	Lys	Ser	Gln	Thr	Thr	Tyr	Tyr	Ala	Gln	Cys	Tyr	Arg	His
			245						250				255	
Leu	Asp	Leu	Gln	Lys	Gln	Leu	Gly	Ser	Ser	Gln	Gly	Ala	Ile	Ser
		260					265						270	
His	Leu	Arg	Gly	His	His	Arg	Ala	Arg	Leu	Pro	Pro	Leu	Ser	Ser
		275					280					285		
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305					310					315				320
Pro	Pro	Ala	Ser	Gly	Thr	Arg	Lys	Ala	Arg	Val	Leu	Tyr	Asp	Tyr
			325						330				335	
Ala	Ala	Asp	Ser	Ser	Glu	Leu	Ala	Leu	Leu	Ala	Asp	Glu	Leu	Ile
			340				345					350		
Val	Tyr	Ser	Leu	Pro	Gly	Met	Asp	Pro	Asp	Trp	Leu	Ile	Gly	Glu
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&lt;210&gt; 5037

&lt;211&gt; 2102

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5037

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120

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180

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240

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 2002

&lt;210&gt; 5036

&lt;211&gt; 384

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5036

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 Phe Gly Gln Ala Glu Lys Thr Glu Leu Asp Ala His Phe Glu Asn Leu  
 35 40 45  
 Leu Ala Arg Ala Asp Ser Thr Lys Asn Trp Thr Glu Lys Ile Leu Arg  
 50 55 60  
 Gln Thr Glu Val Leu Leu Gln Pro Asn Pro Ser Ala Arg Val Glu Glu

420 425 430  
 Leu Arg Tyr Gly Ser Arg Asp Asp Leu Val Ala Gly Pro Gly Phe Gly  
 435 440 445  
 Gly Ala Arg Asn Pro Ala Leu Gln Thr Ser Leu Ser Ser Leu Ser Ser  
 450 455 460  
 Ser Val Ser Arg Ala Pro Arg Thr Ser Ser Ser Ser Leu Gln Ala Asp  
 465 470 475 480  
 Gln Ala Ser Ser Asn Ala Pro Gly Ala Pro Ala Gln Gln Trp Leu Thr  
 485 490 495  
 Gln Val Thr Cys Thr Pro Gly Pro Ala Leu Pro Ala Arg His Ser Pro  
 500 505 510  
 Leu Thr Ile Leu Arg Gly Pro Gln Ser Cys Arg Leu His Pro His Gly  
 515 520 525  
 Pro Pro Arg Ala Thr Ala Leu Ala Asp Arg Ala Glu Gly Pro Pro Ser  
 530 535 540  
 Ala Glu Asp Ser Pro Lys  
 545 550

&lt;210&gt; 5035

&lt;211&gt; 2002

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5035

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&lt;400&gt; 5034

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 35 40 45  
 Cys Val Glu Val Thr Gly Lys Phe Arg Gly Gly Val Asn Pro Phe Thr  
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 Pro Arg Tyr Val Val Glu Pro Pro Arg Leu Pro Leu Ala Val Ser Leu  
 85 90 95  
 Lys Pro Pro Phe Leu Arg Pro Glu Leu Leu Asp Arg Ala Ala Pro Leu  
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 Lys Val Lys Leu Ser Asp Asn Gly Leu Lys Ala Gly Leu Gly Arg Ser  
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 145 150 155 160  
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 165 170 175  
 Arg Thr Ser Pro Pro Thr Pro Ala Met Tyr Lys Phe Arg Pro Ala Phe  
 180 185 190  
 Pro Thr Gly Pro Lys Val Pro Phe Cys Gly Pro Gly Glu Gln Val Pro  
 195 200 205  
 Gly Pro Asp Ser Leu Thr Leu Gly Asp Asp Asn Ile Arg Ser Leu Asp  
 210 215 220  
 Phe Val Ser Glu Pro Ser Leu Asp Leu Pro Asp Tyr Gly Pro Gly Gly  
 225 230 235 240  
 Leu His Ala Ala Tyr Pro Pro Ser Pro Pro Leu Ser Ala Ser Asp Ala  
 245 250 255  
 Phe Ser Gly Ala Leu Arg Ser Leu Ser Leu Lys Ala Ser Ser Arg Arg  
 260 265 270  
 Gly Gly Asp His Val Ala Leu Gln Pro Leu Arg Ser Glu Gly Gly Pro  
 275 280 285  
 Pro Thr Pro His Arg Ser Ile Phe Ala Pro His Ala Leu Pro Asn Arg  
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 Gly His Ala Cys Pro Ala His Pro Ala Val Gly Val Ala Gly Tyr His  
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 Pro Val Arg Tyr Asp Asn Leu Ser Arg Thr Ile Met Ala Ser Ile Gln  
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 Glu Arg Lys Asp Arg Glu Glu Arg Glu Arg Leu Leu Arg Ser Gln Ala  
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&lt;210&gt; 5034

&lt;211&gt; 550

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5033

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 <212> DNA  
 <213> Homo sapiens

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<210> 5032  
 <211> 158  
 <212> PRT  
 <213> Homo sapiens

<400> 5032  
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 Lys Arg Arg Ala Val Asp Trp His Ala Leu Glu Arg Pro Lys Gly Cys  
 35 40 45  
 Met Gly Val Leu Ala Arg Glu Ala Pro His Leu Glu Lys Gln Pro Ala  
 50 55 60  
 Ala Gly Pro Gln Arg Val Leu Pro Gly Glu Arg Glu Glu Arg Pro Pro  
 65 70 75 80  
 Thr Leu Ser Ala Ser Phe Arg Thr Met Ala Glu Phe Met Asp Tyr Thr  
 85 90 95  
 Ser Ser Gln Cys Gly Lys Tyr Tyr Ser Ser Val Pro Glu Glu Gly Gly  
 100 105 110  
 Ala Thr His Val Tyr Arg Tyr His Arg Gly Glu Ser Lys Leu His Met  
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 130 135 140  
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&lt;210&gt; 5030

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5030

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			20					25					30		
Val	Ile	Leu	Ile	Phe	Cys	Leu	Met	Thr	Leu	Ile	Gly	Asn	Leu	Phe	Ile
		35					40					45			
Ile	Ile	Leu	Thr	Tyr	Leu	Asp	Ser	His	Leu	His	Thr	Pro	Leu	Tyr	Phe
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Phe	Leu	Ser	Asn	Leu	Ser	Phe	Leu	Asp	Leu	Cys	Tyr	Thr	Thr	Ser	Ser
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Ile	Pro	Gln	Leu	Leu	Val	Ser	Leu	Trp	Gly	Val	Glu	Lys	Thr	Ile	Ser
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Tyr	Ala	Gly	Cys	Met	Val	Gln	Leu	Tyr	Phe	Phe	Leu	Thr	Leu	Gly	Thr
		100						105					110		
Thr	Glu	Cys	Val	Leu	Leu	Val	Val	Met	Ser	Tyr	Asp	Arg	Tyr	Ala	Ala
		115				120						125			
Val	Cys	Arg	Pro	Leu	His	Tyr	Thr	Val	Leu	Met	His	Ser	Arg	Phe	Cys
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His	Leu	Leu	Ala	Val	Ala	Ser	Trp	Val	Ser	Gly	Phe	Thr	Asn	Pro	Ala
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Leu	His	Ser	Ser	Phe	Thr	Phe	Trp	Val	Pro	Leu	Cys	Gly	His	Arg	Gln
			165					170						175	
Ile	Asp	His	Phe	Phe	Cys	Glu	Val	Pro	Ala	Leu	Leu				
		180						185							

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<210> 5028

<211> 68

<212> PRT

<213> Homo sapiens

<400> 5028

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 Lys Thr His Lys Phe Ser Ala Gly Thr Tyr Pro Arg Leu Glu Glu Tyr  
 35 40 45  
 Arg Arg Gly Ile Leu Gly Asp Trp Ser Asn Ala Ile Ser Ala Leu Tyr  
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<210> 5029

<211> 1440

<212> DNA

<213> Homo sapiens

<400> 5029

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<210> 5026

<211> 136

<212> PRT

<213> Homo sapiens

<400> 5026

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Arg	Leu	Asp	Asn	Arg	Gly	Ala	Thr	Lys	Ile	Leu	Ala	Asp	Trp	Trp	Ala
			35				40					45			
Val	Leu	Asp	Pro	Lys	Glu	Lys	Gln	Lys	Tyr	Thr	Asp	Met	Ala	Lys	Glu
			50			55					60				
Tyr	Lys	Asp	Ala	Phe	Met	Lys	Ala	Asn	Pro	Gly	Tyr	Lys	Trp	Cys	Pro
65				70				75					80		
Thr	Thr	Asn	Lys	Pro	Val	Lys	Ser	Pro	His	Pro	Leu	Ser	Ile	His	Glu
			85					90					95		
Arg	Asn	Phe	Gly	Pro	Ser	His	Leu	Thr	Leu	Gln	Glu	Thr	Cys	Gln	Ala
			100					105					110		
Pro	Arg	Lys	Gln	Arg	Leu	Lys	Lys	Cys	Leu	Ser	Leu	Thr	Leu	Glu	Trp
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<210> 5027

<211> 359

<212> DNA

<213> Homo sapiens

<400> 5027

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2220

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145              150              155              160
Ser Gly Gly Ser Glu Xaa Val Ala Cys Leu Gln Gln Ala Ala Ser Thr
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Pro Ala Ser Cys Ile Arg Pro Thr Asn Ala Gly Val Leu Ser Thr Thr
      180              185              190
Pro Ser Gly Lys Ser Val Gly Glu Ala His Ser Val Ser Pro Pro Pro
      195              200              205
Arg Arg Gly Val Thr Ser Val Ile Lys Leu Leu Ser Leu Leu Trp Lys
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His Val Asp Cys Ala Arg Ala Arg Pro Thr Gly Ser Cys Thr Pro Glu
225              230              235              240
Gln Gln Gly Ile Leu Glu Lys Glu Leu Leu Val Arg Tyr Leu Glu Gln
      245              250              255
Arg Arg Gly Lys Ser Arg Ala Ile Gly Cys Asp Glu Val Thr Pro Phe
      260              265              270
Cys Pro Thr Thr Ser Gly Thr Asp Phe Pro Ser Leu Gln Ser Lys Ala
      275              280              285
Gly Leu Ile Ser Val Asn Ser Gly Ala Pro Ala Ser His Glu Cys Ala
      290              295              300
Pro Trp Val Pro Ser Pro Leu Ser Ile Ser Leu Ser Arg Leu Asp Leu
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Gly Ser Gly

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&lt;210&gt; 5025

&lt;211&gt; 2596

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5025

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<211> 323

<212> PRT

<213> Homo sapiens

<400> 5024

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			20				25					30			
Ser	Glu	Ser	Phe	Leu	Pro	Ser	Glu	Gly	Ala	Ser	Ser	Asp	Pro	Val	Thr
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Leu	Arg	Arg	Arg	Met	Leu	Ala	Ala	Ala	Arg	Asn	Gly	Gly	Phe	Arg	Ser
	50				55				60						
Ser	Arg	Pro	Pro	Ser	Ala	Pro	Leu	Pro	Ser	Ser	Ala	Ala	Ser	Cys	Ala
65				70				75					80		
Leu	Cys	Pro	Thr	Asp	Trp	Arg	Arg	Pro	Val	Pro	Ile	Leu	Pro	Leu	His
			85			90					95				
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		100				105					110				
Ile	Val	Phe	Gly	Gln	Leu	Ile	Asn	Leu	Ile	Leu	Leu	Cys	Asn	Thr	Phe

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      35           40           45
Gly Asn Ser Ser Cys Tyr Gly Val Leu Pro Thr Glu Glu Pro Val Tyr
      50           55           60
Asn Trp Arg Thr Val Ile Asn Ser Ala Ala Asp Phe Tyr Phe Glu Gly
      65           70           75           80
Asn Ile His Gln Ser Leu Gln Asn Ile Thr Glu Asn Gln Leu Val Gln
      85           90           95
Pro Thr Ile Leu Gln Gln Lys Gly Gly Lys Gly Arg Lys Lys Leu Arg
      100          105          110
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&lt;210&gt; 5023

&lt;211&gt; 3482

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5023

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Gln	Ser	Pro	Gly	Asp	Ala	Leu
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Gly	Ile	Ile	Leu	Lys	Gly	Ser
	340		345		350	
Asp	Pro	Phe	Asp	Thr	Leu	Ala
	355		360		365	
Ile	Thr	Ser	Ser	Ala	Gln	Phe
	370		375		380	
Ile	His	Lys	Val	Leu	Gly	Met
385			390		395	
Phe	Asn	Ile	His	Asn	Arg	Lys
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Phe						

&lt;210&gt; 5021

&lt;211&gt; 494

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5021

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&lt;210&gt; 5022

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5022

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<211> 433

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<213> Homo sapiens

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 Pro His Gly Pro Pro Gly Pro Leu Gly Leu Leu Gly Val Arg Pro Gly  
 50 55 60  
 Met Pro Pro Gln Pro Gln Gly Pro Ala Pro Leu Arg Arg Pro Asp Ser  
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 Ser Asp Asp Arg Tyr Val Met Thr Lys His Ala Thr Ile Tyr Pro Thr  
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 Glu Glu Glu Leu Gln Ala Val Gln Lys Ile Val Ser Ile Thr Glu Arg  
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 115 120 125  
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 Lys Thr Leu Leu Ser Arg Ile Ala Glu Asn Leu Pro Lys Gln Leu Ala  
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<210> 5018  
 <211> 63  
 <212> PRT  
 <213> Homo sapiens

<400> 5018  
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 35 40 45  
 Pro Pro Ser Ile Ala Ala Val Ser Gln Ser His Gly Arg Arg Ser  
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<210> 5019  
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 <212> DNA  
 <213> Homo sapiens

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<210> 5017
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<212> DNA
<213> Homo sapiens
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4196

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 1360

&lt;210&gt; 5016

&lt;211&gt; 284

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5016

Met	Ser	Ala	Pro	Trp	Arg	Arg	Ala	Arg	Pro	Val	Thr	Thr	Ser	Gln	Arg
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Pro	Arg	Pro	Ser	Pro	Gln	Val	Pro	Pro	Leu	Ser	Ala	Gly	Pro	Ala	Ala
			20					25					30		
Ala	Ala	Ile	Phe	Val	Gly	Gly	Ser	Gln	Ala	Trp	Leu	Glu	Met	Pro	Lys
		35					40					45			
Ser	Cys	Ala	Ala	Arg	Gln	Cys	Cys	Asn	Arg	Tyr	Ser	Ser	Arg	Arg	Lys
	50				55						60				
Gln	Leu	Thr	Phe	His	Arg	Phe	Pro	Phe	Ser	Arg	Pro	Glu	Leu	Leu	Lys
65				70					75					80	
Glu	Trp	Val	Leu	Asn	Ile	Gly	Arg	Gly	Asn	Phe	Lys	Pro	Lys	Gln	His
			85					90						95	
Thr	Val	Ile	Cys	Ser	Glu	His	Phe	Arg	Pro	Glu	Cys	Phe	Ser	Ala	Phe

405 410 415  
 Asp Gln Pro Cys Leu Cys Pro Ala Pro Ser Val Arg Thr Ala Val Ala  
 420 425 430  
 Leu Thr Thr Pro Asp Ile Thr Leu Val Leu Pro Pro Asp Val Ile Gln  
 435 440 445  
 Gln Glu Ala Ser Ala Leu Arg Glu Glu Thr Glu Ala Trp Ala Arg Pro  
 450 455 460  
 His Glu Ser Leu Ala Arg Glu Glu Ala Leu Thr Ala Leu Gly Lys Leu  
 465 470 475 480  
 Leu Tyr Leu Leu Asp Gly Met Leu Asp Gly Gln Val Asn Ser Gly Ile  
 485 490 495  
 Ala Ala Thr Pro Ala Ser Ala Ala Ala Thr Leu Asp Val Ala Val  
 500 505 510  
 Arg Arg Gly Leu Ser His Gly Ala Gln Arg Leu Leu Cys Val Ala Leu  
 515 520 525  
 Gly Gln Leu Asp Arg Pro Pro Asp Leu Ala His Asp Gly Arg Ser Leu  
 530 535 540  
 Trp Leu Asn Ile Arg Gly Lys Glu Ala Ala Ala Leu Ser Met Phe His  
 545 550 555 560  
 Val Ser Thr Pro Leu Pro Val Met Thr Gly Gly Phe Leu Ser Cys Ile  
 565 570 575  
 Leu Gly Leu Val Leu Pro Leu Ala Tyr Gly Phe Gln Pro Asp Leu Val  
 580 585 590  
 Leu Val Ala Leu Gly Pro Gly His Gly Leu Gln Gly Pro His Ala Ala  
 595 600 605  
 Leu Leu Ala Ala Met Leu Arg Gly Leu Ala Gly Gly Arg Val Leu Ala  
 610 615 620  
 Leu Leu Glu Glu Val Ser Trp Ala Gly Trp Arg Cys Cys Gly Val Gly  
 625 630 635 640  
 Arg Gly Glu Gly Pro Val Thr Ala Ser Val Phe Ala Pro Gly Pro Glu  
 645 650 655  
 Leu His Thr Pro Ala Ser Arg Asp Pro Gly Pro Gly Ala Glu Trp Arg  
 660 665 670  
 Gly Thr Ser  
 675

&lt;210&gt; 5015

&lt;211&gt; 1360

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5015

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&lt;213&gt; Homo sapiens

&lt;400&gt; 5014

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Arg Gly Arg Leu Gly Thr Gln Gly Asp His Gly Ala Ala Met Gly Thr
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 35           40           45
Asp Arg Leu Arg Gln Arg Gly Leu Glu Gln Arg Cys Leu Arg Leu Ser
 50           55           60
Ala Arg Glu Ala Ser Glu Glu Glu Leu Gly Leu Val His Ser Pro Glu
 65           70           75           80
Tyr Val Ser Leu Val Arg Glu Thr Gln Val Leu Gly Lys Glu Glu Leu
 85           90           95
Gln Ala Leu Ser Gly Gln Phe Asp Ala Ile Tyr Phe His Pro Ser Thr
 100          105          110
Phe His Cys Ala Arg Leu Ala Ala Gly Ala Gly Leu Gln Leu Val Asp
 115          120          125
Ala Val Leu Thr Gly Ala Val Gln Asn Gly Leu Ala Leu Val Arg Pro
 130          135          140
Pro Gly His His Gly Gln Arg Ala Ala Ala Asn Gly Phe Cys Val Phe
 145          150          155          160
Asn Asn Val Ala Ile Ala Ala Ala His Ala Lys Gln Lys His Gly Leu
 165          170          175
His Arg Ile Leu Val Val Asp Trp Asp Val His His Gly Gln Gly Ile
 180          185          190
Gln Tyr Leu Phe Glu Asp Asp Pro Ser Val Leu Tyr Phe Ser Trp His
 195          200          205
Arg Tyr Glu His Gly Arg Phe Trp Pro Phe Leu Arg Glu Ser Asp Ala
 210          215          220
Asp Ala Val Gly Arg Gly Gln Gly Leu Gly Phe Thr Val Asn Leu Pro
 225          230          235          240
Trp Asn Gln Val Gly Met Gly Asn Ala Asp Tyr Val Ala Ala Phe Leu
 245          250          255
His Leu Leu Leu Pro Leu Ala Phe Glu Phe Asp Pro Glu Leu Val Leu
 260          265          270
Val Ser Ala Gly Phe Asp Ser Ala Ile Gly Asp Pro Glu Gly Gln Met
 275          280          285
Gln Ala Thr Pro Glu Cys Phe Ala His Leu Thr Gln Leu Leu Gln Val
 290          295          300
Leu Ala Gly Gly Arg Val Cys Ala Val Leu Glu Gly Gly Tyr His Leu
 305          310          315          320
Glu Ser Leu Ala Glu Ser Val Cys Met Thr Val Gln Thr Leu Leu Gly
 325          330          335
Asp Pro Ala Pro Pro Leu Ser Gly Pro Met Ala Pro Cys Gln Arg Cys
 340          345          350
Glu Gly Ser Ala Leu Glu Ser Ile Gln Ser Ala Arg Ala Ala Gln Ala
 355          360          365
Pro His Trp Lys Ser Leu Gln Gln Asp Val Thr Ala Val Pro Met
 370          375          380
Ser Pro Ser Ser His Ser Pro Glu Gly Arg Pro Pro Pro Leu Leu Pro
 385          390          395          400
Gly Gly Pro Val Cys Lys Ala Ala Ala Ser Ala Pro Ser Ser Leu Leu

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&lt;210&gt; 5014

&lt;211&gt; 675

&lt;212&gt; PRT

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Pro	Gln	Asp	Ser	Trp	Arg	Gly	Pro	Pro	Pro	Leu	Phe	Gln	Gln	Gln	Arg
865					870					875					880
Phe	Asp	Arg	Gly	Val	Gly	Ala	Glu	Pro	Leu	Leu	Pro	Trp	Asn	Arg	Met
			885						890					895	
Leu	Gln	Thr	Gln	Asn	Ala	Ala	Phe	Gln	Pro	Asn	Gln	Tyr	Gln	Met	Leu
			900					905					910		
Ala	Gly	Pro	Gly	Gly	Tyr	Pro	Pro	Arg	Arg	Asp	Asp	Arg	Gly	Gly	Arg
	915						920					925			
Gln	Gly	Tyr	Pro	Arg	Glu	Gly	Arg	Lys	Tyr	Pro	Leu	Pro	Pro	Pro	Ser
	930					935					940				
Gly	Arg	Tyr	Asn	Trp	Asn										
945					950										

&lt;210&gt; 5013

&lt;211&gt; 2480

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5013

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1020

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4190

&lt;400&gt; 5012

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 20          25          30
Lys Ile Pro Val Asp Ala Ser Lys Pro Asn Pro Asn Asp Val Glu Phe
 35          40          45
Asp Asn Leu Tyr Leu Asp Met Asn Gly Ile Ile His Pro Cys Thr His
 50          55          60
Pro Glu Asp Lys Pro Ala Pro Lys Asn Glu Asp Glu Met Met Val Ala
 65          70          75          80
Ile Phe Glu Tyr Ile Asp Arg Leu Phe Ser Ile Val Arg Pro Arg Arg
 85          90          95
Leu Leu Tyr Met Ala Ile Asp Gly Val Ala Pro Arg Val Lys Met Asn
100          105          110
Gln Gln Arg Ser Arg Arg Phe Arg Ala Ile Lys Glu Gly Met Glu Ala
115          120          125
Ala Val Glu Lys Gln Arg Val Arg Glu Glu Ile Leu Ala Lys Gly Gly
130          135          140
Phe Leu Pro Pro Glu Glu Ile Lys Glu Arg Phe Asp Ser Asn Cys Ile
145          150          155          160
Thr Pro Gly Thr Glu Phe Met Asp Asn Leu Ala Lys Cys Leu Arg Tyr
165          170          175
Tyr Ile Ala Asp Arg Leu Asn Asn Asp Pro Gly Trp Lys Asn Leu Thr
180          185          190
Val Ile Leu Ser Asp Ala Ser Ala Pro Gly Glu Gly Glu His Lys Ile
195          200          205
Met Asp Tyr Ile Arg Arg Gln Arg Ala Gln Pro Asn His Asp Pro Asn
210          215          220
Thr His His Cys Leu Cys Gly Ala Asp Ala Asp Leu Ile Met Leu Gly
225          230          235          240
Leu Ala Thr His Glu Pro Asn Phe Thr Ile Arg Glu Glu Phe Lys
245          250          255
Pro Asn Lys Pro Lys Pro Cys Gly Leu Cys Asn Gln Phe Gly His Glu
260          265          270
Val Lys Asp Cys Glu Gly Leu Pro Arg Glu Lys Lys Gly Lys His Asp
275          280          285
Glu Leu Ala Asp Ser Leu Pro Cys Ala Glu Gly Glu Phe Ile Phe Leu
290          295          300
Arg Leu Asn Val Leu Arg Glu Tyr Leu Glu Arg Glu Leu Thr Met Ala
305          310          315          320
Ser Leu Pro Phe Thr Phe Asp Val Glu Arg Ser Ile Asp Asp Trp Val
325          330          335
Phe Met Cys Phe Phe Val Gly Asn Asp Phe Leu Pro His Leu Pro Ser
340          345          350
Leu Glu Ile Arg Glu Asn Ala Ile Asp Arg Leu Val Asn Ile Tyr Lys
355          360          365
Asn Val Val His Lys Thr Gly Gly Tyr Leu Thr Glu Ser Gly Tyr Val
370          375          380
Asn Leu Gln Arg Val Gln Met Ile Met Leu Ala Val Gly Glu Val Glu
385          390          395          400
Asp Ser Ile Phe Lys Arg Lys Asp Asp Glu Asp Ser Phe Arg Arg
405          410          415
Arg Gln Lys Glu Lys Arg Lys Arg Met Lys Arg Asp Gln Pro Ala Phe

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&lt;210&gt; 5012

&lt;211&gt; 950

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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<210> 5010

<211> 119

<212> PRT

<213> Homo sapiens

<400> 5010

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Ser	Tyr	Ala	Cys	Phe	Phe	Phe	Leu	Ser	Pro	Ser	Leu	Leu	Phe	Leu	Pro
			20				25				30				
Asn	Leu	Pro	Gly	Arg	Val	His	Gln	Phe	Phe	Ile	Ser	Pro	Leu	Phe	Ile
	35					40				45					
Leu	Ser	Phe	Glu	Val	Ile	Leu	Ile	His	Phe	Leu	His	Leu	Gln	Pro	Pro
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Val	Leu	Leu	Asp	Leu	Ala	Pro	Asn	Leu	Leu	Leu	Pro	Phe	Gly	Thr	Glu
65				70				75					80		
Glu	Lys	Leu	Leu	Ser	Ser	Pro	Cys	Phe	Ala	Asp	Ile	Ser	Lys	Gly	Lys
			85				90						95		
Glu	Ser	Thr	Gly	Pro	Phe	Ile	Ser	Cys	Pro	Arg	Pro	Ser	Gln	Gly	Ala
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<210> 5011

<211> 3431

<212> DNA

<213> Homo sapiens

<400> 5011

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 420 425 430  
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 Leu Tyr Ser Phe Cys Ser Ser Val Ser Ser Ile Ser Leu Ser Thr Val  
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 Ser Lys Ser Asp Tyr Gly Gln Gly Arg Pro Val Lys Ala Arg Ser Gly  
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 Pro Asn Leu His Ser Ser Asn  
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&lt;210&gt; 5009

&lt;211&gt; 426

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5009

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<210> 5008

<211> 487

<212> PRT

<213> Homo sapiens

<400> 5008

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			20					25					30		
Ser	Met	Ala	Lys	Ile	His	Ala	Arg	Asn	Gly	Asp	Leu	Ser	Glu	Ala	Ala
			35					40					45		
Met	Cys	Tyr	Ile	His	Ile	Ala	Ala	Leu	Ile	Ala	Glu	Tyr	Leu	Lys	Arg
			50					55					60		
Lys	Gly	Met	Phe	Ser	Met	Gly	Trp	Pro	Ala	Val	Leu	Ser	Ile	Thr	Pro
65						70				75					80
Asn	Ile	Lys	Glu	Glu	Gly	Ala	Met	Lys	Glu	Asp	Ser	Gly	Met	Gln	Asp
			85						90					95	
Thr	Pro	Tyr	Asn	Glu	Asn	Ile	Leu	Val	Glu	Gln	Leu	Tyr	Met	Cys	Val
			100						105					110	
Glu	Phe	Leu	Trp	Lys	Ser	Glu	Arg	Tyr	Glu	Xaa	Ser	Leu	Leu	Met	Ser
			115						120					125	
Thr	Ser	Pro	Ser	Leu	Leu	Ser	Leu	Arg	Asn	Asn	Glu	Thr	Ser	Lys	Asn
			130						135					140	
Ser	Asp	Leu	Tyr	Tyr	Asp	Ile	His	Arg	Ser	Tyr	Leu	Lys	Val	Ala	Glu
145						150				155					160
Val	Val	Asn	Ser	Glu	Ala	Ala	Val	Trp	Ser	Leu	Leu	Ser	Cys	Gly	Ile

&lt;210&gt; 5007

&lt;211&gt; 2165

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5007

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&lt;210&gt; 5006

&lt;211&gt; 165

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5006

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Ala	Leu	Glu	Glu	Gln	Leu	Leu	Lys	Tyr	Ser	Pro	Asp	Pro	Val	Val	Val
		20					25					30			
Arg	Gly	Ser	Gly	His	Val	Thr	Val	Phe	Gly	Leu	Ser	Asn	Lys	Phe	Glu
		35				40						45			
Ser	Glu	Phe	Pro	Ser	Ser	Leu	Thr	Gly	Lys	Val	Ala	Pro	Glu	Glu	Phe
	50					55				60					
Lys	Ala	Ser	Ile	Asn	Arg	Val	Asn	Ser	Cys	Leu	Lys	Lys	Asn	Leu	Pro
65				70					75				80		
Val	Asn	Val	Arg	Trp	Leu	Leu	Cys	Gly	Cys	Leu	Cys	Cys	Cys	Cys	Thr
			85					90					95		
Leu	Gly	Cys	Ser	Met	Trp	Pro	Val	Ile	Cys	Leu	Ser	Lys	Arg	Thr	Arg
			100				105						110		
Arg	Ser	Ile	Glu	Lys	Leu	Leu	Glu	Trp	Glu	Asn	Asn	Arg	Leu	Tyr	His
		115					120					125			
Lys	Leu	Cys	Leu	His	Trp	Arg	Leu	Ser	Lys	Arg	Lys	Cys	Glu	Thr	Asn
	130					135					140				
Asn	Met	Met	Glu	Tyr	Val	Ile	Leu	Ile	Glu	Phe	Leu	Pro	Lys	Thr	Pro
145					150				155					160	
Ile	Phe	Arg	Pro	Asp											
				165											

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    405                                      410                                      415  
 Gln Ser Gly Asp Ile Glu Ile Val Asn His Lys Thr Asn Asp Arg Cys  
    420                                      425                                      430  
 Gln Leu Lys Phe Leu Pro Tyr Ser Tyr Phe Ser Lys Glu Ala Ala Arg  
    435                                      440                                      445  
 Lys Val Thr Gly Val Val Ser Asp Ser Gln Gly Lys Ala His Tyr Val  
    450                                      455                                      460  
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 545                                      550                                      555                                      560  
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    580                                      585                                      590  
 Arg Glu Gly Arg Pro Gly Gly Glu Glu Arg Gly Ala Arg Val Gly Val  
    595                                      600                                      605  
 Pro Gln Gly Arg Ile Pro Gly Glu Gln Ala Thr Ser Pro Pro Thr Ser  
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 Pro Leu Cys Leu Pro Ser Arg Glu Gly Gly Gly Cys Leu His Ala Thr  
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 Val Val

&lt;210&gt; 5005

&lt;211&gt; 1120

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5005

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<211> 642  
 <212> PRT  
 <213> Homo sapiens

<400> 5004

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Asp Asp Leu Ser Thr Cys Asn Asp Leu Ile Ala Lys His Gly Ala Ala
 35           40           45
Leu Gln Arg Ser Leu Asn Glu Leu Asp Gly Leu Lys Ile Pro Ser Glu
 50           55           60
Ser Gly Glu Lys Leu Lys Val Val Asn Glu Arg Ala Thr Leu Phe Arg
 65           70           75           80
Ile Thr Ser Asn Ala Met Ile Asn Ala Cys Arg Asp Phe Leu Glu Leu
 85           90           95
Ala Glu Ile His Ser Arg Lys Trp Gln Arg Ala Leu Gln Tyr Glu Gln
 100          105          110
Glu Gln Arg Val His Leu Glu Glu Thr Ile Glu Gln Leu Ala Lys Gln
 115          120          125
His Asn Ser Leu Glu Arg Ala Phe His Ser Ala Pro Gly Arg Pro Ala
 130          135          140
Asn Pro Ser Lys Ser Phe Ile Glu Gly Ser Leu Leu Thr Pro Lys Gly
 145          150          155          160
Glu Asp Ser Glu Glu Asp Glu Asp Thr Glu Tyr Phe Asp Ala Met Glu
 165          170          175
Asp Ser Thr Ser Phe Ile Thr Val Ile Thr Glu Ala Lys Glu Asp Ser
 180          185          190
Arg Lys Ala Glu Gly Ser Thr Gly Thr Ser Ser Val Asp Trp Ser Ser
 195          200          205
Ala Asp Asn Val Leu Asp Gly Ala Ser Leu Val Pro Lys Gly Ser Ser
 210          215          220
Lys Val Lys Arg Arg Val Arg Ile Pro Asn Lys Pro Asn Tyr Ser Leu
 225          230          235          240
Asn Leu Trp Ser Ile Met Lys Asn Cys Ile Gly Arg Glu Leu Ser Arg
 245          250          255
Ile Pro Met Pro Val Asn Phe Asn Glu Pro Leu Ser Met Leu Gln Arg
 260          265          270
Leu Thr Glu Asp Leu Glu Tyr His His Leu Leu Asp Lys Ala Val His
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Cys Thr Ser Ser Val Glu Gln Met Cys Leu Val Ala Ala Phe Ser Val
 290          295          300
Ser Ser Tyr Ser Thr Thr Val His Arg Ile Ala Lys Pro Phe Asn Pro
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Met Leu Gly Glu Thr Phe Glu Leu Asp Arg Leu Asp Asp Met Gly Leu
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Arg Ser Leu Cys Glu Gln Val Ser His His Pro Pro Ser Ala Ala His
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Tyr Val Phe Ser Lys His Gly Trp Ser Leu Trp Gln Glu Ile Thr Ile
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&lt;210&gt; 5003

&lt;211&gt; 3729

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5003

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&lt;210&gt; 5002

&lt;211&gt; 335

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5002

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<212> DNA
<213> Homo sapiens
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<211> 464

<212> PRT

<213> Homo sapiens

<400> 4998

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 <211> 217  
 <212> PRT  
 <213> Homo sapiens

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 Ser Pro His Thr Pro Asn Glu Lys Phe Tyr Gly Val Thr Val Phe Lys  
 85 90 95  
 Ala Leu Lys Leu Gly Gln Glu Gly Lys Val Pro Leu Gln Ser Ala His  
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 Phe Arg Leu Asp Thr Pro Leu Tyr Phe Ser Tyr Ser His Leu Val Cys  
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 Arg Thr Ala Ile Glu Glu Val Gln Ala Glu Arg Lys Asp Asp Ser His  
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 Pro Val His Val Asp Asn Cys Ile Leu Asn Ala Glu Thr Leu Val Cys  
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 Val Lys Glu Pro Pro Ala Tyr Thr Phe Arg Asp Tyr Ser Ala Ile Leu  
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&lt;210&gt; 4995

&lt;211&gt; 1595

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4995

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&lt;210&gt; 4994

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4994

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Ala	Pro	Gln	Gly	Asp	Met	Ile	Tyr	Asp	Pro	Ser	Trp	His	His	Pro	Pro
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Pro	Leu	Ile	Pro	Tyr	Tyr	Ser	Lys	Met	Val	Phe	Glu	Thr	Gly	Gln	Phe
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130															

&lt;400&gt; 4991

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 828

&lt;210&gt; 4992

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4992

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 Glu Leu Arg Asp Lys Tyr Leu Glu Glu Lys Glu Asp Leu Glu Leu Lys  
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 Cys Ser Thr Leu Gly Lys Asp Cys Glu Met Tyr Lys His Arg Met Asn  
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 Thr Val Met Leu Gln  
 65

&lt;210&gt; 4993

&lt;211&gt; 837

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4993

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<211> 54

<212> PRT

<213> Homo sapiens

<400> 4990

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			20					25					30		
Glu	Gln	Ala	Ser	Phe	Leu	Ala	Ser	Ser	Phe	Ser	Ser	Ser	Ala	Gly	Pro
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<210> 4991

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<213> Homo sapiens

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			20					25					30		
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Leu	Pro	Thr	Val	Thr	Cys	Val	Ser	Ile	Lys	Ser	Trp	Lys	Met	Glu	Cys
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Pro	His	Gln	Gly	Asp	Gly	Val	Thr	Thr	Glu	Ala	Gly	Ser	Glu	Leu	Pro
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<210> 4989

<211> 1723

<212> DNA

<213> Homo sapiens

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300
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530	535	540
Asp Leu Met Gly Glu Leu Ile	Ser Asp Glu Ala Pro	Ser Ile Pro Ala
545	550	555
Pro Thr Pro Gln Leu Ser Pro	Ala Leu Ser Thr Ile Thr	Asp Phe Ser
565	570	575
Pro Glu Trp Ser Tyr Pro Glu	Gly Gly Val Lys Val Leu	Ile Thr Gly
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Ala Val Pro Ala Ser Leu Val	Gln Pro Gly Val Leu Arg	Cys Tyr Cys
610	615	620
Pro Ala His Glu Val Gly Leu	Val Ser Leu Gln Val Ala	Gly Arg Glu
625	630	635
Gly Pro Leu Ser Ala Ser Val	Leu Phe Glu Tyr Arg Ala	Arg Arg Phe
645	650	655
Leu Ser Leu Pro Ser Thr Gln	Leu Asp Trp Leu Ser Leu	Asp Asp Asn
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Gln Phe Arg Met Ser Ile Leu	Glu Arg Leu Glu Gln Met	Glu Lys Arg
675	680	685
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Ala Pro Pro Val Gln Asp Glu	Gly Gln Gly Pro Gly Phe	Glu Ala Arg
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Val Val Val Leu Val Glu Ser	Met Ile Pro Arg Ser Thr	Trp Lys Gly
725	730	735
Pro Glu Arg Leu Ala His Gly	Ser Pro Phe Arg Gly Met	Ser Leu Leu
740	745	750
His Leu Ala Ala Ala Gln Gly	Tyr Ala Arg Leu Ile Glu	Thr Leu Ser
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785	790	795
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820	825	830
Val Ala His Ser Arg Gly His	Val Arg Leu Ala Arg Cys	Leu Glu Glu
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885	890	895
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4161

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<212> PRT

<213> Homo sapiens

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Met	Asn	Thr	Lys	Asp	Thr	Thr	Glu	Val	Ala	Glu	Asn	Ser	His	His	Leu
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Lys	Ile	Phe	Leu	Pro	Lys	Lys	Leu	Leu	Glu	Cys	Leu	Pro	Arg	Cys	Pro
	50					55					60				
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250

255

&lt;210&gt; 4985

&lt;211&gt; 5695

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4985

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 1418

&lt;210&gt; 4984

&lt;211&gt; 256

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4984

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 Gly Ser Phe Leu Ala Arg Ala Lys Phe Ile Pro Leu Ile Thr Val Lys  
 35 40 45  
 Ser Cys Leu Asp Leu Leu Val Asn Trp Leu His Ile Tyr Leu Asn Asn  
 50 55 60  
 Gln Asp Ser Gly Thr Lys Ala Phe Cys Asp Val Ala Leu His Gly Pro  
 65 70 75 80  
 Phe Tyr Ser Ala Cys Gln Ala Val Phe Tyr Thr Phe Val Phe Arg His  
 85 90 95  
 Lys Gln Leu Leu Ser Gly Asn Leu Lys Glu Gly Leu Gln Tyr Leu Gln  
 100 105 110  
 Ser Leu Asn Phe Glu Arg Ile Val Met Ser Gln Leu Asn Pro Leu Lys  
 115 120 125  
 Ile Cys Leu Pro Ser Val Val Asn Phe Phe Ala Ala Ile Thr Asn Lys  
 130 135 140  
 Tyr Gln Leu Val Phe Cys Tyr Thr Ile Ile Glu Arg Asn Asn Arg Gln  
 145 150 155 160  
 Met Leu Pro Val Ile Arg Ser Thr Ala Gly Gly Asp Ser Val Gln Thr  
 165 170 175  
 Cys Thr Asn Pro Leu Asp Thr Phe Phe Pro Phe Asp Pro Cys Val Leu  
 180 185 190  
 Lys Arg Ser Lys Lys Phe Ile Asp Pro Ile Tyr Gln Val Trp Glu Asp  
 195 200 205  
 Met Ser Ala Glu Glu Leu Gln Glu Phe Lys Lys Pro Met Lys Lys Asp  
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 Gln Pro Pro Ser Pro Arg Phe Lys Arg Phe Ser Cys Leu Leu Ser  
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1902

&lt;210&gt; 4982

&lt;400&gt; 4980

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 Leu Arg Thr Leu Gly Ser Ser Gly Ser Glu Ser Ser Thr Pro Glu Asn  
 35 40 45  
 Val Gly Pro Pro Phe Leu Met Asp Glu Asn Ser Trp Phe Asn Lys Cys  
 50 55 60  
 Lys Arg Val Lys Gln Lys Tyr Gln Leu Thr Leu Glu Gln Lys Gly Tyr  
 65 70 75 80  
 Leu Glu Glu Leu Leu Arg Leu Arg Glu Asn Gln Leu Ser Glu Ser Val  
 85 90 95  
 Ser Gln Asn Lys Ile Leu Leu Gln Arg Ile Glu Asp Ser Asp Leu Ala  
 100 105 110  
 His Lys Leu Glu Lys Glu Gln Leu Glu Tyr Ile Ile Val Glu Leu Gln  
 115 120 125  
 Asp Gln Leu Thr Val Leu Lys Asn Asn Asp Leu Arg Ser Arg Gln Glu  
 130 135 140  
 Leu Thr Ala His Leu Thr Asn Gln Trp Pro Ser Pro Gly Ala Leu Asp  
 145 150 155 160  
 Val Asn Ala Val Ala Leu Asp Thr Leu Leu Tyr Arg Lys His Asn Lys  
 165 170 175  
 Gln Trp Lys Ser Tyr Gln Ser Leu Asp Gln Leu Ser Ala Glu Val Ser  
 180 185 190  
 Leu Ser Gln Thr Ser Leu Asp Pro Gly Gln Ser Gln Glu Gly Asp Gly  
 195 200 205  
 Lys Gln Asp Thr Leu Asn Val Met Ser Glu Gly Lys Glu Asp Thr Pro  
 210 215 220  
 Ser Leu Leu Gly Leu Cys Gly Ser Leu Thr Ser Val Ala Ser Tyr Lys  
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 Ser Leu Thr Ser Leu Lys Ser Asn Asp Tyr Leu Ala Ser Pro Thr Thr  
 245 250 255  
 Glu Met Thr Ser Pro Gly Leu Thr Pro Ser  
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&lt;210&gt; 4981

&lt;211&gt; 1902

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4981

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1865

&lt;210&gt; 4980

&lt;211&gt; 266

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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                                  565                      570                      575  
 Met Tyr Cys Thr Asp Pro Gly Glu Val Asp His Ser Thr Arg Leu Ile  
                                  580                      585                      590  
 Ser Asp Pro Val Leu Leu Val Gly Thr Thr Ile Gln Tyr Thr Cys Asn  
                                  595                      600                      605  
 Pro Gly Phe Val Leu Glu Gly Ser Ser Leu Leu Thr Cys Tyr Ser Arg  
                                  610                      615                      620  
 Glu Thr Gly Thr Pro Ile Trp Thr Ser Arg Leu Pro His Cys Val Ser  
 625                                   630                      635                      640  
 Glu Glu Ser Leu Ala Cys Asp Asn Pro Gly Leu Pro Glu Asn Gly Tyr  
                                  645                      650                      655  
 Gln Ile Leu Tyr Lys Arg Leu Tyr Leu Pro Gly Glu Ser Leu Thr Phe  
                                  660                      665                      670  
 Met Cys Tyr Glu Gly Phe Glu Leu Met Gly Glu Val Thr Ile Arg Cys  
                                  675                      680                      685  
 Ile Leu Gly Gln Pro Ser His Trp Asn Gly Pro Leu Pro Val Cys Lys  
                                  690                      695                      700  
 Val Asn Gln Asp Ser Phe Glu His Ala Leu Glu Ala Glu Ala Ala Ala  
 705                                   710                      715                      720  
 Glu Thr Ser Leu Glu Gly Gly Asn Met Ala Leu Ala Ile Phe Ile Pro  
                                  725                      730                      735  
 Val Leu Ile Ile Ser Leu Leu Leu Gly Gly Ala Tyr Ile Tyr Ile Thr  
                                  740                      745                      750  
 Arg Cys Arg Tyr Tyr Ser Asn Leu Arg Leu Pro Leu Met Tyr Ser His  
                                  755                      760                      765  
 Pro Tyr Ser Gln Ile Thr Val Glu Thr Glu Phe Asp Asn Pro Ile Tyr  
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 Glu Thr Gly Gly Thr Gln Lys Val  
 785                                   790

&lt;210&gt; 4979

&lt;211&gt; 1865

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4979

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 Arg Thr Phe Gln Asp Asp Gly Leu Gly Thr Phe Gln Leu His Tyr Gln  
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 165 170 175  
 Val Thr Val Met Asp Leu His Ser Gly Gly Val Ala His Phe His Cys  
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 His Leu Gly Tyr Glu Leu Gln Gly Ala Lys Met Leu Thr Cys Ile Asn  
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 Ala Ser Lys Pro His Trp Ser Ser Gln Glu Pro Ile Cys Ser Ala Pro  
 210 215 220  
 Cys Gly Gly Ala Val His Asn Ala Thr Ile Gly Arg Val Leu Ser Pro  
 225 230 235 240  
 Ser Tyr Pro Glu Asn Thr Asn Gly Ser Gln Phe Cys Ile Trp Thr Ile  
 245 250 255  
 Glu Ala Pro Glu Gly Gln Lys Leu His Leu His Phe Glu Arg Leu Leu  
 260 265 270  
 Leu His Asp Lys Asp Arg Met Thr Val His Ser Gly Gln Thr Asn Lys  
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 Pro Gly His Ser Leu Glu Gln Gly Pro Ala Ile Ile Glu Cys Ile Asn  
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 Val Arg Asp Pro Tyr Trp Asn Asp Thr Glu Pro Leu Cys Arg Ala Met  
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 Cys Gly Gly Glu Leu Ser Ala Val Ala Gly Val Val Leu Ser Pro Asn  
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 Trp Pro Glu Pro Tyr Val Glu Gly Glu Asp Cys Ile Trp Lys Ile His  
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 Val Gly Glu Glu Lys Arg Ile Phe Leu Asp Ile Gln Phe Leu Asn Leu  
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&lt;210&gt; 4978

&lt;211&gt; 792

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4978

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Glu	Thr	Thr	Thr	Ser	Thr	Ile	Ile	Thr	Thr	Thr	Val	Ile	Thr	Thr	Glu
			35				40					45			
Gln	Ala	Pro	Ala	Leu	Cys	Ser	Val	Ser	Phe	Ser	Asn	Pro	Glu	Gly	Tyr
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Ile	Asp	Ser	Ser	Asp	Tyr	Pro	Leu	Leu	Pro	Leu	Asn	Asn	Phe	Leu	Glu
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Cys	Thr	Tyr	Asn	Val	Thr	Val	Tyr	Thr	Gly	Tyr	Gly	Val	Glu	Leu	Gln
			85					90					95		
Val	Lys	Ser	Val	Asn	Leu	Ser	Asp	Gly	Glu	Leu	Leu	Ser	Ile	Arg	Gly
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 Thr Lys Val Asn Leu Leu His Glu Arg Leu Gln Asp Leu Lys Ser Arg  
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 Ile Arg Lys Lys Ile Phe Gln Glu Ala Leu  
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&lt;210&gt; 4977

&lt;211&gt; 3309

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4977

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&lt;210&gt; 4976

&lt;211&gt; 298

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4976

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		20					25					30			
Gly	Asp	Glu	Ile	Gln	Ile	Leu	Ser	Asn	Leu	Val	Met	Glu	Glu	Leu	Leu
		35				40					45				
Pro	Thr	Leu	Gln	Thr	Asp	Leu	Leu	Pro	Lys	Met	Lys	Gly	Lys	Lys	Asn
		50			55					60					
Asp	Arg	Lys	Arg	Thr	Trp	Leu	Gly	Leu	Leu	Glu	Glu	Ala	Tyr	Thr	Leu
65				70				75					80		
Val	Gln	His	Gln	Val	Ser	Glu	Gly	Leu	Ser	Ala	Leu	Lys	Glu	Glu	Cys
		85					90					95			
Arg	Ala	Leu	Thr	Lys	Gly	Leu	Glu	Gly	Thr	Ile	Arg	Ser	Asp	Met	Asp
		100				105						110			
Gln	Ile	Val	Asn	Ser	Lys	Asn	Tyr	Leu	Ile	Gly	Lys	Ile	Lys	Ala	Met
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Val	Ala	Gln	Pro	Ala	Glu	Lys	Ser	Cys	Leu	Glu	Ser	Val	Gln	Pro	Phe

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<400> 4974  
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 Tyr Arg Gly Ala Ala Gly Ala Leu Met Val Tyr Asp Ile Thr Arg Arg  
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 165 170 175  
 Gln Asp Gly Ser Leu Asp Leu Asn Ala Ala Glu Ser Gly Val Gln His  
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<210> 4975  
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 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 4973

&lt;211&gt; 3555

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4973

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<211> 558

<212> PRT

<213> Homo sapiens

<400> 4972

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Lys	Thr	Gln	Ala	Glu	Ala	Val	Ala	Glu	Ala	Glu	Leu	Lys	Thr	Glu	Ser
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Pro Pro Lys Gly Glu Gly Glu Arg Ala Gly Val Glu Arg Thr Gln Lys			
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&lt;210&gt; 4971

&lt;211&gt; 2939

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4971

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&lt;210&gt; 4970

&lt;211&gt; 155

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4970

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&lt;400&gt; 4969

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&lt;210&gt; 4967

&lt;211&gt; 550

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4967

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&lt;210&gt; 4968

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4968

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			20					25					30		
Leu	Asp	Leu	Gln	Asn	Ser	Trp	Xaa	Tyr	Thr	Arg	Glu	Pro	Pro	Cys	Pro
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&lt;210&gt; 4969

&lt;211&gt; 2911

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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&lt;210&gt; 4966

&lt;211&gt; 212

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4966

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			35				40					45			
Asn	Asn	Ile	Ala	Asn	Leu	Lys	Ile	Ser	Leu	Leu	Asn	Lys	Asp	Lys	Ile
			50				55				60				
Glu	Leu	Asp	Ser	Ser	Ser	Pro	Ala	Ser	Lys	Glu	Asn	Glu	Glu	Lys	Val
65					70				75					80	
Cys	Leu	Glu	Tyr	Asn	Glu	Glu	Leu	Glu	Lys	Leu	Cys	Glu	Glu	Leu	Gln
			85					90					95		
Ala	Thr	Leu	Asp	Gly	Leu	Thr	Lys	Ile	Gln	Val	Lys	Met	Glu	Lys	Leu
			100				105					110			
Ser	Ser	Thr	Thr	Lys	Gly	Ile	Cys	Glu	Leu	Glu	Asn	Tyr	His	Tyr	Gly
			115				120				125				
Glu	Glu	Ser	Lys	Arg	Pro	Pro	Leu	Phe	His	Thr	Trp	Pro	Thr	Thr	His
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Phe	Tyr	Glu	Val	Ser	His	Lys	Leu	Leu	Glu	Met	Tyr	Arg	Lys	Glu	Leu
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Gly Leu Glu His Leu Ala Val Arg Gln Ser Pro Ala Trp Arg Ile Leu		
145	150	155
Pro Ala Lys Ile Ala Glu Val Met Glu Glu Leu Lys Ala Val Glu Val		
165	170	175
Phe Leu Lys Ser Asp Ser Leu Cys Leu Met Glu Gly Arg Arg Phe Arg		
180	185	190
Ala Gln Pro Thr Leu Pro Ser Ala His Leu Leu Ala Met His Ile Gln		
195	200	205
Gln Leu Glu Thr Gly Gly Phe Thr Met Thr Asn Gly Ala His Arg Trp		
210	215	220
Ser Lys Leu Arg Asn Ile Ala Lys Val Val Ser Gln Val His Ala Phe		
225	230	235
Gln Glu Asn Pro Tyr Thr Phe Ser Pro Asp Pro Lys Leu Gln Ser Tyr		
245	250	255
Leu Lys Gln Arg Ile Ala Arg Phe Ser Gly Ala Asp Ile Ser Thr Leu		
260	265	270
Ala Ala Asp Ser Arg Ala Asn Phe His Gln Val Ser Ser Glu Lys His		
275	280	285
Ser Arg Lys Ile Gln Asp Lys Leu Arg Arg Met Lys Ala Thr Phe Gln		
290	295	300

&lt;210&gt; 4965

&lt;211&gt; 1474

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4965

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 1140  
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 1575

&lt;210&gt; 4964

&lt;211&gt; 304

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4964

Leu	Glu	Asp	Phe	Tyr	Gly	Pro	Cys	Ala	Lys	Thr	Ser	Glu	Lys	Gly	Pro
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Tyr	Phe	Leu	Thr	Glu	Tyr	Ser	Thr	His	Gln	Leu	Phe	Ser	Gln	Leu	Thr
		20						25					30		
Leu	Leu	Gln	Gln	Glu	Leu	Phe	Gln	Lys	Cys	His	Pro	Val	His	Phe	Leu
		35					40					45			
Asn	Ser	Arg	Ala	Leu	Gly	Val	Met	Asp	Lys	Ser	Thr	Ala	Ile	Pro	Lys
	50					55					60				
Ala	Ser	Ser	Ser	Glu	Ser	Leu	Ser	Ala	Lys	Thr	Cys	Ser	Leu	Phe	Leu
65				70					75					80	
Pro	Asn	Tyr	Val	Gln	Asp	Lys	Tyr	Leu	Leu	Gln	Leu	Leu	Arg	Asn	Ala
			85					90					95		
Asp	Asp	Val	Ser	Thr	Trp	Val	Ala	Ala	Glu	Ile	Val	Thr	Ser	His	Thr
		100					105						110		
Ser	Lys	Leu	Gln	Val	Asn	Leu	Leu	Ser	Lys	Phe	Xaa	Leu	Ile	Ala	Lys

865                      870                      875                      880  
 Thr Ala Leu Leu Val Ala Gly Ser Arg Leu Trp Val Gly Thr Gly Asn  
                                  885                      890                      895  
 Gly Val Val Ile Ser Ile Pro Leu Thr Glu Thr Val Val Leu His Arg  
                                  900                      905                      910  
 Gly Gln Leu Leu Gly Leu Arg Ala Asn Lys Thr Ser Pro Thr Ser Gly  
                                  915                      920                      925  
 Glu Gly Ala Arg Pro Gly Gly Ile Ile His Val Tyr Gly Asp Asp Ser  
                                  930                      935                      940  
 Ser Asp Arg Ala Ala Ser Ser Phe Ile Pro Tyr Cys Ser Met Ala Gln  
 945                      950                      955                      960  
 Ala Gln Leu Cys Phe His Gly His Arg Asp Ala Val Lys Phe Phe Val  
                                  965                      970                      975  
 Ser Val Pro Gly Asn Val Leu Ala Thr Leu Asn Gly Ser Val Leu Asp  
                                  980                      985                      990  
 Ser Pro Ala Glu Gly Pro Gly Pro Ala Ala Pro Ala Ser Glu Val Glu  
                                  995                      1000                      1005  
 Gly Gln Lys Leu Arg Asn Val Leu Val Leu Ser Gly Gly Glu Gly Tyr  
                                  1010                      1015                      1020  
 Ile Asp Phe Arg Ile Gly Asp Gly Glu Asp Asp Glu Thr Glu Glu Gly  
 1025                      1030                      1035                      1040  
 Ala Gly Asp Met Ser Gln Val Lys Pro Val Leu Ser Lys Ala Glu Arg  
                                  1045                      1050                      1055  
 Ser His Ile Ile Val Trp Gln Val Ser Tyr Thr Pro Glu  
                                  1060                      1065

&lt;210&gt; 4963

&lt;211&gt; 1575

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4963

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 660

435 440 445  
 Ser Gly Trp Arg Pro Asn Glu Asp Asp Ala Gly Asn Gly Val Lys Pro  
 450 455 460  
 Ala Pro Gly Arg Asp Pro Leu Thr Cys Asp Arg Glu Gly Asp Gly Glu  
 465 470 475 480  
 Pro Lys Ser Ala His Ala Ser Pro Glu Lys Lys Lys Ala Lys Glu Leu  
 485 490 495  
 Pro Glu Met Asp Ala Thr Ser Ser Arg Val Trp Ile Leu Thr Ser Thr  
 500 505 510  
 Leu Thr Thr Ser Lys Val Val Ile Ile Asp Ala Asn Gln Pro Gly Thr  
 515 520 525  
 Val Val Asp Gln Phe Thr Val Cys Asn Ala His Val Leu Cys Ile Ser  
 530 535 540  
 Ser Ile Pro Ala Ala Ser Asp Ser Asp Tyr Pro Pro Gly Glu Met Phe  
 545 550 555 560  
 Leu Asp Ser Asp Val Asn Pro Glu Asp Pro Gly Ala Asp Gly Val Leu  
 565 570 575  
 Ala Gly Ile Thr Leu Val Gly Cys Ala Thr Arg Cys Asn Val Pro Arg  
 580 585 590  
 Ser Asn Cys Ser Ser Arg Gly Asp Thr Pro Val Leu Asp Lys Gly Gln  
 595 600 605  
 Gly Glu Val Ala Thr Ile Ala Asn Gly Lys Val Asn Pro Ser Gln Ser  
 610 615 620  
 Thr Glu Glu Ala Thr Glu Ala Thr Glu Val Pro Asp Pro Gly Pro Ser  
 625 630 635 640  
 Glu Pro Glu Thr Ala Thr Leu Arg Pro Gly Pro Leu Thr Glu His Val  
 645 650 655  
 Phe Thr Asp Pro Ala Pro Thr Pro Ser Ser Gly Pro Gln Pro Gly Ser  
 660 665 670  
 Glu Asn Gly Pro Glu Pro Asp Ser Ser Ser Thr Arg Pro Glu Pro Glu  
 675 680 685  
 Pro Ser Gly Asp Pro Thr Gly Ala Gly Ser Ser Ala Ala Pro Thr Met  
 690 695 700  
 Trp Leu Gly Ala Gln Asn Gly Trp Leu Tyr Val His Ser Ala Val Ala  
 705 710 715 720  
 Asn Trp Lys Lys Cys Leu His Ser Ile Lys Leu Lys Asp Ser Val Leu  
 725 730 735  
 Ser Leu Val His Val Lys Gly Arg Val Leu Val Ala Leu Ala Asp Gly  
 740 745 750  
 Thr Leu Ala Ile Phe His Arg Gly Glu Asp Gly Gln Trp Asp Leu Ser  
 755 760 765  
 Asn Tyr His Leu Met Asp Leu Gly His Pro His His Ser Ile Arg Cys  
 770 775 780  
 Met Ala Val Val Tyr Asp Arg Val Trp Cys Gly Tyr Lys Asn Lys Val  
 785 790 795 800  
 His Val Ile Gln Pro Lys Thr Met Gln Ile Glu Lys Ser Phe Asp Ala  
 805 810 815  
 His Pro Arg Arg Glu Ser Gln Val Arg Gln Leu Ala Trp Ile Gly Asp  
 820 825 830  
 Gly Val Trp Val Ser Ile Arg Leu Asp Ser Thr Leu Arg Leu Tyr His  
 835 840 845  
 Ala His Thr His Gln His Leu Gln Asp Val Asp Ile Glu Pro Tyr Val  
 850 855 860  
 Ser Lys Met Leu Gly Thr Gly Lys Leu Gly Phe Ser Phe Val Arg Ile

1	5	10	15
Ser Ser Val Pro Ser Ala Ala Val Thr Pro Leu Asn Glu Ser Leu Gln			
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Pro Leu Gly Asp Tyr Gly Val Gly Ser Lys Asn Ser Lys Arg Ala Arg			
35	40	45	
Glu Lys Arg Asp Ser Arg Asn Met Glu Val Gln Val Thr Gln Glu Met			
50	55	60	
Arg Asn Val Ser Ile Gly Met Gly Ser Ser Asp Glu Trp Ser Asp Val			
65	70	75	80
Gln Asp Ile Ile Asp Ser Thr Pro Glu Leu Asp Met Cys Pro Glu Thr			
85	90	95	
Arg Leu Asp Arg Thr Gly Ser Ser Pro Thr Gln Gly Ile Val Asn Lys			
100	105	110	
Ala Phe Gly Ile Asn Thr Asp Ser Leu Tyr His Glu Leu Ser Thr Ala			
115	120	125	
Gly Ser Glu Val Ile Gly Asp Val Asp Glu Gly Ala Asp Leu Leu Gly			
130	135	140	
Glu Phe Ser Gly Met Gly Lys Glu Val Gly Asn Leu Leu Leu Glu Asn			
145	150	155	160
Ser Gln Leu Leu Glu Thr Lys Asn Ala Leu Asn Val Val Lys Asn Asp			
165	170	175	
Leu Ile Ala Lys Val Asp Gln Leu Ser Gly Glu Gln Glu Val Leu Arg			
180	185	190	
Gly Glu Leu Glu Ala Ala Lys Gln Ala Lys Val Lys Leu Glu Asn Arg			
195	200	205	
Ile Lys Glu Leu Glu Glu Glu Leu Lys Arg Val Lys Ser Glu Ala Ile			
210	215	220	
Ile Ala Arg Arg Glu Pro Lys Glu Glu Ala Glu Asp Val Ser Ser Tyr			
225	230	235	240
Leu Cys Thr Glu Ser Asp Lys Ile Pro Met Ala Gln Arg Arg Arg Phe			
245	250	255	
Thr Arg Val Glu Met Ala Arg Val Leu Met Glu Arg Asn Gln Tyr Lys			
260	265	270	
Glu Arg Leu Met Glu Leu Gln Glu Ala Val Arg Trp Thr Glu Met Ile			
275	280	285	
Arg Ala Ser Arg Glu His Pro Ser Val Gln Glu Lys Lys Ser Thr			
290	295	300	
Ile Trp Gln Phe Phe Ser Arg Leu Phe Ser Ser Ser Ser Ser Pro Pro			
305	310	315	320
Pro Ala Lys Arg Pro Tyr Pro Ser Val Asn Ile His Tyr Lys Ser Pro			
325	330	335	
Thr Thr Ala Gly Phe Ser Gln Arg Arg Asn His Ala Met Cys Pro Ile			
340	345	350	
Ser Ala Gly Ser Arg Pro Leu Glu Phe Phe Pro Asp Asp Asp Cys Thr			
355	360	365	
Ser Ser Ala Arg Arg Glu Gln Lys Arg Glu Gln Tyr Arg Gln Val Arg			
370	375	380	
Glu His Val Arg Asn Asp Asp Gly Arg Leu Gln Ala Cys Gly Trp Ser			
385	390	395	400
Leu Pro Ala Lys Tyr Lys Gln Leu Ser Pro Asn Gly Gly Gln Glu Asp			
405	410	415	
Thr Arg Met Lys Asn Val Pro Val Pro Val Tyr Cys Arg Pro Leu Val			
420	425	430	
Glu Lys Asp Pro Thr Met Lys Leu Trp Cys Ala Ala Gly Val Asn Leu			

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 4737

&lt;210&gt; 4962

&lt;211&gt; 1069

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4962

Ala Ala Ala Thr Pro Ser Thr Thr Gly Thr Lys Ser Asn Thr Pro Thr

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1860  
ccgtcccagt ccacagagga ggccacagag gccacggagg tgccagaccc tgggcccagc  
1920  
gagccagaga cagccacatt gcggcccggg cctctcacag agcacgtctt cactgaccca  
1980  
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1740

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4959

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 420  
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 449

&lt;210&gt; 4960

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4960

Met	Phe	Asn	Ser	Thr	Gln	Asn	Thr	Trp	Gly	Cys	Gly	Leu	Trp	Ser	His
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Lys	Val	Lys	Trp	Arg	Pro	Ser	Glu	Ser	Ser	Lys	Gly	Leu	Pro	Tyr	His
			20					25					30		
Ile	Trp	Arg	Ile	Arg	Cys	Phe	Ser	Pro	Ile	Ser	Gln	Gly	Trp	Lys	Leu
		35					40					45			
Ala	Ser	Ile	Leu	Arg	Trp	Pro	Glu	Ala	Leu	Pro	Leu	Arg	Gln	Ile	Met
	50					55				60					
Thr	Pro	Asp	Ala	Ser	Ser	Pro	Leu	Tyr	Pro	Cys	His	Met	Glu	Gly	Pro
65				70						75				80	
Lys	His	Leu	Ala	Leu	Asn	Cys	Lys	Trp	Lys	Pro	Pro	Gln	Pro	Leu	His
			85						90					95	
Gln	Pro	Pro	Ala	Lys	Glu	Thr	Thr	Thr	Thr	Ile	Cys	Ile	Pro	Ser	Leu
			100					105					110		
Asp	Thr	Arg													
		115													

&lt;210&gt; 4961

&lt;211&gt; 4737

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4961

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<210> 4957  
 <211> 872  
 <212> DNA  
 <213> Homo sapiens

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 tcttgacaag actgtacagg gcttctcatc atacacaaac cctccacagc ccacggctcc  
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 780  
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 872

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 <213> Homo sapiens

<400> 4958  
 Gln Ile Phe Ile Arg Asn Ser Val Pro Tyr Phe Ala Arg Ser Pro Ala  
 1 5 10 15  
 Pro Pro Pro Pro Ser Arg Ser Gly Ala Pro Pro Gln Pro Pro Ala Thr  
 20 25 30  
 Thr Ala Ile Ala Pro Gln Asp Thr Pro Ser Thr Thr Arg Thr Ala Arg  
 35 40 45  
 Arg Ser Ser  
 50

<210> 4959  
 <211> 449

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      50              55              60
Trp Asn Gln Leu Val Thr Ala Ala Gly Pro Ser Arg Pro Ile Trp Ile
65              70              75              80
Asp Pro Leu Gly Thr His Cys Thr Arg Glu Pro Gln Met Gln Leu Ser
      85              90              95
Ser Met Gly Gly Ala Leu Ser Ala Gly Gly Val Trp Asp Arg Arg Arg
      100              105              110
Glu Ala

```

&lt;210&gt; 4955

&lt;211&gt; 364

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4955

```

agatctaagg ccctcgggag agatgggaac tgagcacctg ggtcttagac cggaggagca
60
aactgcaaga caggggtggcc ggggacacca gcctccgccc ttctgtgaca taaggacaag
120
agctcagcct gcccgaggaa aactctgggc aagagatgtg gaaagaaaga gctcangggg
180
gggcacgcat ggcacccctg ggggacatct gagggcaccc ccaccacta ttcctccctc
240
caaggtggcc tctgagtgtg aaggcagggg gaagcagaca cctgccccctc actctccctc
300
cctaccacat agctaccggg tggggggcgt ccctgggatg attcctgagg gcaggatcca
360
gggg
364

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&lt;210&gt; 4956

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4956

```

Met Gly Thr Glu His Leu Gly Leu Arg Pro Glu Glu Gln Thr Ala Arg
  1              5              10              15
Gln Gly Gly Arg Gly His Gln Pro Pro Pro Phe Cys Asp Ile Arg Thr
      20              25              30
Arg Ala Gln Pro Ala Gln Glu Gln Leu Trp Ala Arg Asp Val Glu Arg
      35              40              45
Lys Ser Ser Xaa Gly Gly Thr His Gly Ile Leu Gly Gly His Leu Arg
      50              55              60
Ala Pro Pro Pro Thr Ile Pro Pro Ser Lys Val Ala Ser Glu Cys Glu
      65              70              75              80
Gly Arg Gly Lys Gln Thr Pro Ala Pro His Ser Pro Ser Leu Pro His
      85              90              95
Ser Tyr Arg Val Gly Gly Val Pro Gly Met Ile Pro Glu Gly Arg Ile
      100              105              110
Gln Gly

```

145                      150                      155                      160  
 Leu Glu Glu Glu Gln Lys Leu Val Gln Leu Gly Gln Ala Glu Lys Arg  
                                  165                      170                      175  
 Lys Thr Asp Gln Phe Leu Arg Asp Ala Val Glu Thr Arg Leu Arg Met  
                                  180                      185                      190  
 Leu Ile Pro Tyr Ile Glu His Trp Pro Arg Ala Leu Ser Ile Leu Met  
                                  195                      200                      205  
 Leu Pro His Asn Ile Pro Ser Ser Leu Ser Leu Leu Thr Ser Met Val  
                                  210                      215                      220  
 Asp Asp Met Trp His Tyr Ala Gly Asp Gln Ser Thr Asp Phe Asn Trp  
 225                                   230                                   235                                   240  
 Tyr Thr Arg Arg Ala Met Leu Ala Ala Ile Tyr Asn Thr Thr Glu Leu  
                                  245                                   250                                   255  
 Val Met Met Gln Asp Ser Ser Pro Asp Phe Glu Asp Thr Trp Arg Phe  
                                  260                                   265                                   270  
 Leu Glu Asn Arg Val Asn Asp Ala Met Asn Met Gly His Thr Ala Lys  
                                  275                                   280                                   285  
 Gln Val Lys Ser Thr Gly Glu Ala Leu Val Gln Gly Leu Met Gly Ala  
                                  290                                   295                                   300  
 Ala Val Thr Leu Lys Asn Leu Thr Gly Leu Asn Gln Arg Arg  
 305                                   310                                   315

&lt;210&gt; 4953

&lt;211&gt; 355

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4953

gtgcacgcag gaaatggcgg gtgggaggca ggacaggaga gcccaggcct ggacaccact  
 60  
 gtcagcctgg ggatgcttgg cggtctctcc agtcctggga gcaggcatca cctggccgcg  
 120  
 ggtgccccct ggtggcagct tgaaggaagg acgggcagtg ggtcgagcc agcggggacc  
 180  
 taccgccgaa aacgcacata aaagctggaa tcagcttggt acagctgcag gtccctctcg  
 240  
 tccgatttgg atagaccctc ttgggaccca ctgcaccagg gaaccccaaa tgcagctcag  
 300  
 cagcatggga ggagccctgt ctgctggggg tgtctgggat cgtcggagag aggct  
 355

&lt;210&gt; 4954

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4954

Met Ala Gly Gly Arg Gln Asp Arg Arg Ala Gln Ala Trp Thr Pro Leu  
   1                                  5                                  10                                  15  
 Ser Ala Trp Gly Cys Leu Ala Ala Ser Pro Val Leu Gly Ala Gly Ile  
                                   20                                  25                                  30  
 Thr Trp Pro Arg Val Pro Pro Gly Gly Ser Leu Lys Glu Gly Arg Ala  
                                   35                                  40                                  45  
 Val Gly Arg Ser Gln Arg Gly Pro Thr Pro Gln Asn Ala His Lys Ser

gaaaaccggg ttaatgatgc aatgaacatg ggccacactg ccaagcaggt aaagtccaca  
 1080  
 ggagaggcac tgggtgcaagg actcatgggt gcagcagtga cgctcaagaa cttgacaggt  
 1140  
 ctaaaccagc gtcggtgaga ggaaggggta taagctacaa tgcctagaag agaattgagcg  
 1200  
 gacagattga aagagctttg aaaagtataa ggtgccatcc acataacctg gtgttcacga  
 1260  
 gaacacacta aaggactcct gagtcactac cacagccacc tggaaaccac aaggcatttg  
 1320  
 atgctaccgt tctggtcagg gattgggctg cttcttcagt tcctaatacc agaccaagcc  
 1380  
 tcctgatgcc tttctgcact gcaactgtgt gattgaaaaa tgagatgttc atccaagcag  
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 1560  
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 1620  
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 1680  
 tgagacaagt gcctgctgga cagaggtgtg attccaggcc tgggtgtcaca tgacaccagc  
 1740  
 atgcattgca ggattattag tgtattttga gtctgtaaaa ataataaata tgtttgaagt  
 1800  
 agttaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa  
 1835

&lt;210&gt; 4952

&lt;211&gt; 318

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4952

Met	Ala	Ala	Ala	Ala	Val	Ser	Gly	Ala	Leu	Gly	Arg	Ala	Gly	Trp	Arg
1				5					10					15	
Leu	Leu	Gln	Leu	Arg	Cys	Leu	Pro	Val	Ala	Arg	Cys	Arg	Gln	Ala	Leu
			20						25				30		
Val	Pro	Arg	Ala	Phe	His	Ala	Ser	Ala	Val	Gly	Leu	Arg	Ser	Ser	Asp
			35					40				45			
Glu	Gln	Lys	Gln	Gln	Pro	Pro	Asn	Ser	Phe	Ser	Gln	Gln	His	Ser	Glu
	50				55						60				
Thr	Gln	Gly	Ala	Glu	Lys	Pro	Asp	Pro	Glu	Ser	Ser	His	Ser	Pro	Pro
65					70					75				80	
Arg	Tyr	Thr	Asp	Gln	Gly	Gly	Glu	Glu	Glu	Glu	Asp	Tyr	Glu	Ser	Glu
				85					90				95		
Glu	Gln	Leu	Gln	His	Arg	Ile	Leu	Thr	Ala	Ala	Leu	Glu	Phe	Val	Pro
			100					105				110			
Ala	His	Gly	Trp	Thr	Ala	Glu	Ala	Ile	Ala	Glu	Gly	Ala	Gln	Ser	Leu
		115				120					125				
Gly	Leu	Ser	Ser	Ala	Ala	Ala	Ser	Met	Phe	Gly	Arg	Met	Gly	Ser	Glu
	130					135					140				
Leu	Ile	Leu	His	Phe	Val	Thr	Gln	Cys	Asn	Thr	Arg	Leu	Thr	Arg	Val

210	215	220
Ala Ala Gln Phe Cys Lys Asn Ala Asn Gly Ser Tyr Thr Cys Glu Glu		
225	230	235
Cys Asp Ser Ser Cys Val Gly Cys Thr Gly Glu Gly Pro Gly Asn Cys		240
	245	250
Lys Glu Cys Ile Ser Gly Tyr Ala Arg Glu His Gly Gln Cys Ala Asp		255
	260	265
Val Asp Glu Cys Ser Leu Ala Glu Lys Thr Cys Val Arg Lys Asn Glu		270
	275	280
Asn Cys Tyr Asn Thr Pro Gly Ser Tyr Val Cys Val Cys Pro Asp Gly		285
	290	295
Phe Glu Glu Xaa Gly Arg Cys Leu Cys Ala Ala Gly Arg Gly		300
305	310	315

&lt;210&gt; 4951

&lt;211&gt; 1835

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4951

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ngagctcttg cgctcagctg gccccacca ctctcacctg ccgcctgggc tcgctcccg
60
cttctctcca gccgtcgact ccacgcctcg cgcctctcgc gagaggagga ggctccacgg
120
agcgacgact tccgccctcc ttagggccgt ggtcccgtag ctaccggctg cgtcgccgtg
180
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240
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300
ccgcgtgcct tccatgcttc agctgtgggg ctaaggtctt cagatgagca gaagcagcag
360
cctcccaact cattttctca gcagcattct gagaca'cagg gggcagaaaa acctgatcca
420
gagtcttctc attcaccccc caggtataca gaccagggcg gcgaggagga ggaggactat
480
gaaagtgagg agcagttgca gcaccgcac ctgacggcag cccttgagtt tgtgcccgcc
540
cacgggtgga cagcagaggc gattgcagaa ggagcccagt ctctgggtct ctccagtga
600
gcagccagca tgtttggaag gatgggcagt gagctaatac tgcattttgt gaccagtg
660
aataccggc tcacacgtgt gctagaagag gagcagaagc tggtagagtt gggccaggcg
720
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780
atcccatata ttgagcactg gccccgggccc ctacgcatcc tcatgctccc tcacaacatc
840
ccgtccagcc tgagcctgct caccagcatg gtggatgaca tgtggcatta cgctggggac
900
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960
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1020

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 720  
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 780  
 tctggctacg cgagggagca cggacagtgt gcagatgtgg acgagtgtc actagcagaa  
 840  
 aaaacctgtg tgaggaaaaa cgaaaactgc tacaatactc cagggagcta cgtctgtgtg  
 900  
 tgtcctgacg gcttcgaaga anacggaaga tgctgtgtg ccgccggcag aggctgaagc  
 960  
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 1020  
 taccctttaa attattcaga aggatgtccc gtggaaaatg tggccctgag gatgccgtct  
 1080  
 cctgcagtgg acagcggcgg ggagaggctg cctgctctct aacggttgat tctcatttgc  
 1140  
 cccttaaaca gctgcatttc ttggtgttgc ttaaacagac ttgtatatatt tgatacagtt  
 1200  
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 1259

<210> 4950

<211> 318

<212> PRT

<213> Homo sapiens

<400> 4950

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Arg	Gly	Leu	Val	Asp	Lys	Phe	Asn	Gln	Gly	Met	Val	Asp	Thr	Ala	Lys
			20					25					30		
Lys	Asn	Phe	Gly	Gly	Gly	Asn	Thr	Ala	Trp	Glu	Glu	Lys	Thr	Leu	Ser
			35				40						45		
Lys	Tyr	Glu	Ser	Ser	Glu	Ile	Arg	Leu	Leu	Glu	Ile	Leu	Glu	Gly	Leu
			50				55					60			
Cys	Glu	Ser	Ser	Asp	Phe	Glu	Cys	Asn	Gln	Met	Leu	Glu	Ala	Gln	Glu
65					70					75					80
Glu	His	Leu	Glu	Ala	Trp	Trp	Leu	Gln	Leu	Lys	Ser	Glu	Tyr	Pro	Asp
				85					90					95	
Leu	Phe	Glu	Trp	Phe	Cys	Val	Lys	Thr	Leu	Lys	Val	Cys	Cys	Ser	Pro
			100						105					110	
Gly	Thr	Tyr	Gly	Pro	Asp	Cys	Leu	Ala	Cys	Gln	Gly	Gly	Ser	Gln	Arg
			115					120					125		
Pro	Cys	Ser	Gly	Asn	Gly	His	Cys	Ser	Gly	Asp	Gly	Ser	Arg	Gln	Gly
			130				135					140			
Asp	Gly	Ser	Cys	Arg	Cys	His	Met	Gly	Tyr	Gln	Gly	Pro	Leu	Cys	Thr
145					150					155					160
Asp	Cys	Met	Asp	Gly	Tyr	Phe	Ser	Ser	Leu	Arg	Asn	Glu	Thr	His	Ser
				165					170					175	
Ile	Cys	Thr	Ala	Cys	Asp	Glu	Ser	Cys	Lys	Thr	Cys	Ser	Gly	Leu	Thr
			180						185					190	
Asn	Arg	Asp	Cys	Gly	Glu	Cys	Glu	Val	Gly	Trp	Val	Leu	Asp	Glu	Gly
			195				200					205			
Ala	Cys	Val	Asp	Val	Asp	Glu	Cys	Ala	Ala	Glu	Pro	Pro	Pro	Cys	Ser

aaaaaaaaaa aaaaaaaaaa  
2060

<210> 4948

<211> 127

<212> PRT

<213> Homo sapiens

<400> 4948

Ala	Glu	Leu	Thr	Pro	Leu	Pro	Phe	Ser	Leu	Gln	Ala	Leu	Ser	Ile	Leu
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Met	Leu	Pro	His	Asn	Ile	Pro	Ser	Ser	Leu	Ser	Leu	Leu	Thr	Ser	Met
			20				25					30			
Val	Asp	Asp	Met	Trp	His	Tyr	Ala	Gly	Asp	Gln	Ser	Thr	Asp	Phe	Asn
	35					40				45					
Trp	Tyr	Thr	Arg	Arg	Ala	Met	Leu	Ala	Ala	Ile	Tyr	Asn	Thr	Thr	Glu
	50				55					60					
Leu	Val	Met	Met	Gln	Asp	Ser	Ser	Pro	Asp	Phe	Glu	Asp	Thr	Trp	Arg
65				70				75					80		
Phe	Leu	Glu	Asn	Arg	Val	Asn	Asp	Ala	Met	Asn	Met	Gly	His	Thr	Ala
			85					90					95		
Lys	Gln	Val	Lys	Ser	Thr	Gly	Glu	Ala	Leu	Val	Gln	Gly	Leu	Met	Gly
			100					105					110		
Ala	Ala	Val	Thr	Leu	Lys	Asn	Leu	Thr	Xaa	Leu	Asn	Gln	Arg	Arg	
		115				120						125			

<210> 4949

<211> 1259

<212> DNA

<213> Homo sapiens

<400> 4949

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120  
gcttgggagg aaaagacgct gtccaagtac gagtccagcg agattcgctt gctggagatc  
180  
ctggaggggc tgtgagagag cagcgacttc gaatgcaatc agatgctaga ggcgaggag  
240  
gagcacctgg aggctgggtg gctgcagctg aagagcgaat atcctgactt attcgagtgg  
300  
ttttgtgtga agacactgaa agtgtgtgtc tctccaggaa cctacgggtcc cgactgtctc  
360  
gcatgccagg gcggatccca gaggcctgc agcgggaatg gccactgcag cggagatggg  
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600  
gtgggctggg tgctggacga gggcgctgt gtggatgtgg acgagtgtgc ggccgagccg  
660

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480  
tgcacgtatg aggccctcaa ctgccttctt gattcagcat agtgttttct tctgggctgc  
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600  
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acggactcct atctctgctt ctccctttgt gtgacagact ggggtatctt tgcccatcct  
720  
tgcttagacc agtctagacc ctctggccct ctgcattccc agttccaaat gctagggatg  
780  
gagaatgtgc ttgggcttgc ataagacggg gctatgcccc tggctctcct cagctgtagt  
840  
cagcattgct agctgcccac aactcacgcc agtgggtgaa gatgctggtc tcagagaacc  
900  
agagcttggc agggccctc atacacctct tggagaggta gatgctggtc aactatgcac  
960  
cattacctgt gagcagagct tactcctctg ccattctctc tccaggccct cagcatcctc  
1020  
atgctccctc acaacatccc gtccagcctg agcctgctca ccagcatggg ggatgacatg  
1080  
tggcattacg ctggggacca gtccactgat tttaactggg acaccgccc agccatgctg  
1140  
gctgccatct acaacacaac agagctgggt atgatgcagg actcctctcc agactttgag  
1200  
gacacttggc gcttcttga aaaccgggtt aatgatgcaa tgaacatggg ccacactgcc  
1260  
aagcaggtaa agtccacagg agaggcactg gtgcaaggac tcatgggtgc agcagtgcg  
1320  
ctcaagaact tgacangtct aaaccagcgt cggtgagagg aaggggtata agctacaatg  
1380  
cctagaagag aatgagcgga cagattgaaa gagctttgaa aagtataagg tgccatccac  
1440  
ataacctggg gttcacgaga acacactaaa ggactcctga gtcactacca cagccacctg  
1500  
gaaaccacaa ggcatttgat gctaccgttc tggtcaggga ttgggctgct tcttcagttc  
1560  
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1620  
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1680  
ggcaccttga tcatgtctta accttccctt aaccttgggg ctccaagcc agagtcaagg  
1740  
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1800  
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1920  
gtgtcacatg acaccagcat gcattgcagg attattagtg tattttgagt ctgtaaaaat  
1980  
aataaatatg ttgaaagtag ttaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  
2040

&lt;210&gt; 4946

&lt;211&gt; 197

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4946

```

Thr Ser Asn Asn Ala Pro Pro Leu Asn Leu Glu Asp Lys Leu Gln Arg
 1          5          10          15
Gly Leu Lys Gly Lys Gln Glu Phe Trp Gln Gln Cys Val Ser Phe Ile
      20          25          30
Pro Pro Gly Gln Glu Tyr Arg Met Tyr Asn Thr Tyr Asp Val His Phe
      35          40          45
Tyr Ala Ser Phe Ala Leu Ile Met Leu Trp Pro Lys Leu Glu Leu Ser
 50          55          60
Leu Gln Tyr Asp Met Ala Leu Ala Thr Leu Arg Glu Asp Leu Thr Arg
65          70          75          80
Arg Arg Tyr Leu Met Ser Gly Val Met Ala Pro Val Lys Arg Arg Asn
      85          90          95
Val Ile Pro His Asp Ile Gly Asp Pro Asp Asp Glu Pro Trp Leu Arg
      100          105          110
Val Asn Ala Tyr Leu Ile His Asp Thr Ala Asp Trp Lys Asp Leu Asn
      115          120          125
Leu Lys Phe Val Leu Gln Val Tyr Arg Asp Tyr Tyr Leu Thr Gly Asp
      130          135          140
Gln Asn Phe Leu Lys Asp Met Trp Pro Val Cys Leu Val Arg Asp Ala
145          150          155          160
His Ala Val Ala Ser Val Pro Gly Val Trp Leu Val Ser Gly Lys Ser
      165          170          175
Leu Ala Gly Cys Cys Leu Ser Ser Val Pro Arg Ser Ser Thr Ser Trp
      180          185          190
Ser Leu Ser Arg Leu
      195

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&lt;210&gt; 4947

&lt;211&gt; 2060

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4947

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gcagggagga ggaatccatg caggagggtta gaagagtcag aagattttat tggctgtctt
120
cacttgaata acagccctgt ggcatttttag atctcgagca ctgggatttg tcaattgtca
180
atgtgatgct tggggactgg catattcggt gcaagggggt ttttcacctt ttctgaagct
240
tcctttttcc tctgttttaa agcatatcac agtatgggccc attctctgag tgaagaaagt
300
acagagtga agtacacccg aagtgaagg gactcagaca tcttgtgtcc tttgctcagc
360
tggaagacta ctaagcacgt agtttcagtc attcagttga tagacatttg aacacttatg
420

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240  
cgacgggtacc tgatgagtggt ggtgatggca cctgtgaaaa ggaggaacgt catcccccat  
300  
gatattgggg acccagatga tgaaccatgg ctccgcgtca atgcatattt aatccatgat  
360  
actgctgatt ggaaggacct gaacctgaag tttgtgctgc aggtttatcg ggactattac  
420  
ctcacgggtg atcaaaactt cctgaaggac atgtggcctg tgtgtctagt aagggatgca  
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960  
gaagcctatg agagactgct gtggaatggt gagttcgggg agcctaagta gtcttaaggc  
1020  
agctgagagg acaccaggag ccttattttt ctcttctcag actccaggcc gctattacaa  
1080  
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1140  
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1792

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<210> 4944

<211> 106

<212> PRT

<213> Homo sapiens

<400> 4944

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Arg	Leu	Phe	Gly	Glu	Val	Thr	Arg	Pro	Thr	Asn	Ser	Lys	Ser	Met	Lys
			20					25					30		
Val	Val	Lys	Leu	Phe	Ser	Glu	Leu	Pro	Leu	Ala	Lys	Lys	Lys	Glu	Thr
		35					40					45			
Tyr	Asp	Trp	Tyr	Pro	Asn	His	His	Thr	Tyr	Ala	Glu	Leu	Met	Gln	Thr
	50					55				60					
Leu	Arg	Phe	Leu	Gly	Leu	Tyr	Arg	Asp	Glu	His	Gln	Asp	Phe	Met	Asp
65					70				75					80	
Glu	Gln	Lys	Arg	Leu	Lys	Lys	Leu	Arg	Gly	Lys	Glu	Lys	Pro	Lys	Lys
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Gly	Glu	Gly	Lys	Arg	Ala	Ala	Lys	Arg	Lys						
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<210> 4945

<211> 1792

<212> DNA

<213> Homo sapiens

<400> 4945

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      245              250              255
Val Val Gln Lys Leu Arg Ala Pro Arg Thr Gln Ala Met Glu Glu Gln
      260              265              270
Leu Val Ser Thr Leu Val Pro Leu Leu Leu Thr Met Gln Glu Gly Asn
      275              280              285
Ser Lys Val Ser Gln Lys Cys Val Lys Thr Leu Leu Arg Cys Ser Tyr
      290              295              300
Phe Met Ala Trp Glu Leu Pro Lys Arg Ala Tyr Ser Arg Lys Pro Trp
305              310              315              320
Asp Asn Gln Gln Gln Thr Val Ala Lys Ile Cys Lys Cys Leu Val Asn
      325              330              335
Thr His Arg Asp Ser Ala Phe Ile Phe Leu Ser Gln Ser Leu Glu Tyr
      340              345              350
Ala Lys Asn Ser Arg Ala Ser Leu Arg Lys Cys Ser Val Met Phe Ile
      355              360              365
Gly Ser Leu Val Pro Cys Met Glu Ser Ile Met Thr Glu Asp Arg Leu
      370              375              380
Asn Glu Val Lys Ala Ala Leu Asp Asn Leu Arg His Asp Pro Glu Ala
385              390              395              400
Ser Val Cys Ile Tyr Ala Ala Gln Val Gln Asp His Ile Leu Ala Ser
      405              410              415
Cys Trp Gln Asn Ser Trp Leu Pro His Gly Asn Ser Trp Val Cys Tyr
      420              425              430
Ser Ala Thr Thr His Arg Trp Ser Pro Ser Cys Glu Asn Leu Pro Thr
      435              440              445
Ser His Gln Arg Arg Ser Trp Ile Met Gln Ala Leu Gly Ser Trp Lys
      450              455              460
Met Ser Leu Lys Lys
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&lt;210&gt; 4943

&lt;211&gt; 1020

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4943

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120
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300
cagttttctt gctcatcaca cggccttcgg cactgtagct ttgggtggtg ggctgcagat
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420

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<210> 4942

<211> 469

<212> PRT

<213> Homo sapiens

<400> 4942

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Pro	Pro	Lys	Asp	Thr	Lys	Lys	Gly	Ala	Gln	Pro	Ser	Pro	Phe	Val	Pro	35	40	45	
Val	Arg	Trp	Val	Val	Lys	Val	Val	Lys	Thr	Leu	Leu	Leu	Arg	Met	Gly	50	55	60	
Cys	Ser	Tyr	Glu	Thr	Thr	Phe	Leu	Glu	Asp	Gln	Gly	Gly	Trp	Glu	Leu	65	70	75	80
Met	Glu	Gln	Val	Glu	Ser	His	His	Arg	Gly	Val	Ala	Leu	Leu	Ala	Arg	85	90	95	
Ala	Met	Val	Gln	Tyr	Ser	Cys	Gln	Glu	Leu	Cys	Arg	Ile	Leu	Tyr	Leu	100	105	110	
Leu	Ile	Pro	Leu	Leu	Glu	Arg	Gly	Asp	Glu	Lys	His	Arg	Ile	Thr	Ala	115	120	125	
Thr	Ala	Phe	Phe	Val	Glu	Leu	Leu	Gln	Met	Glu	Gln	Val	Arg	Arg	Ile	130	135	140	
Pro	Glu	Glu	Tyr	Ser	Leu	Gly	Arg	Met	Ala	Glu	Gly	Leu	Ser	His	His	145	150	155	160
Asp	Pro	Ile	Met	Lys	Val	Leu	Ser	Ile	Arg	Gly	Leu	Val	Ile	Leu	Ala	165	170	175	
Arg	Arg	Ser	Glu	Lys	Thr	Ala	Lys	Val	Lys	Ala	Leu	Leu	Pro	Ser	Met	180	185	190	
Val	Lys	Gly	Leu	Lys	Asn	Met	Asp	Gly	Met	Leu	Val	Val	Glu	Ala	Val	195	200	205	
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	85		90		95										
Ser	Lys	Ala	Ser	Pro	Ala	Pro	Ala	Ala	Leu	Met	Cys	Gly	Thr	Thr	Ser
		100				105						110			
Pro	Pro	Ile	Pro	Ala	Ala	Thr	Glu	Pro	Val	Cys	Ala	Ser	Ser	Arg	
		115				120						125			
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Val	Leu	Ser	Ala	Ser	Ala	Ser	Ser	Ser	Ser	Val	Ser	Leu	Ala		
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&lt;210&gt; 4941

&lt;211&gt; 1718

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4941

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 <212> DNA  
 <213> Homo sapiens

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<210> 4940  
 <211> 158  
 <212> PRT  
 <213> Homo sapiens

<400> 4940  
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 20 25 30  
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 35 40 45  
 Asp Ser Lys Ala Ser Thr Trp Leu Pro Leu Pro Val Thr Ser Ser Ser  
 50 55 60  
 Ala Glu Pro Ser Arg Pro Asn Ser Cys Pro Pro Ala Cys Ser Pro Ala  
 65 70 75 80  
 Ala Ala Ser Ser Phe Ser Phe Glu Ser Gln Pro Cys Pro Ser Ala Pro

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<400> 4938
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          20          25          30
Val Ala Glu Pro Trp Pro Thr Arg Ser Gln Gly Gly Arg Gln Pro Gly
          35          40          45
Cys Thr Leu Thr Leu Gly Val Cys Ala Asp Gly Arg Trp Glu Glu Thr
          50          55          60
Asp Gln Gln Glu Val Phe Ser Ser Gly Val Ala Ser Pro Thr Leu Asn
65          70          75          80
Leu Arg Ala Ser Ser Ser Pro Ala Lys Ala Arg Ala Leu Ser Arg Pro

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<210> 4936

<211> 337

<212> PRT

<213> Homo sapiens

<400> 4936

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			20					25					30		
Gly	Leu	Leu	Cys	Val	Cys	Trp	Ser	Pro	Asp	Gly	Lys	Tyr	Ile	Val	Thr
	35					40					45				
Gly	Gly	Glu	Asp	Asp	Leu	Val	Thr	Val	Trp	Ser	Phe	Val	Asp	Cys	Arg
	50				55					60					
Val	Ile	Ala	Arg	Gly	His	Gly	His	Lys	Ser	Trp	Val	Ser	Val	Val	Ala
65					70				75						80
Phe	Asp	Pro	Tyr	Thr	Thr	Ser	Val	Glu	Glu	Gly	Asp	Pro	Met	Glu	Phe
			85					90					95		
Ser	Gly	Ser	Asp	Glu	Asp	Phe	Gln	Asp	Leu	Leu	His	Phe	Gly	Glu	Ile
	100							105					110		
Glu	Gln	Ile	Val	His	Ser	Pro	Gly	Ser	Pro	Asn	Gly	Thr	Leu	Gln	Thr
	115					120						125			
Ala	Ala	Pro	Ser	Val	Thr	Tyr	Arg	Phe	Gly	Ser	Val	Gly	Gln	Asp	Thr
	130					135					140				
Gln	Leu	Cys	Leu	Trp	Asp	Leu	Thr	Glu	Asp	Ile	Leu	Phe	Pro	His	Gln
145					150				155						160
Pro	Leu	Ser	Arg	Ala	Arg	Thr	His	Thr	Asn	Val	Met	Asn	Ala	Thr	Ser
			165					170					175		
Pro	Pro	Ala	Gly	Ser	Asn	Gly	Asn	Ser	Val	Thr	Thr	Pro	Gly	Asn	Ser
		180				185							190		
Val	Pro	Pro	Pro	Leu	Pro	Arg	Ser	Asn	Ser	Leu	Pro	His	Ser	Ala	Val
	195					200						205			
Ser	Asn	Ala	Gly	Ser	Lys	Ser	Ser	Val	Met	Asp	Gly	Ala	Ile	Ala	Ser
	210					215				220					
Gly	Val	Ser	Lys	Phe	Ala	Thr	Leu	Ser	Leu	His	Asp	Arg	Lys	Glu	Arg
225				230					235						240
His	His	Glu	Lys	Asp	His	Lys	Arg	Asn	His	Ser	Met	Gly	His	Ile	Ser
			245					250					255		
Ser	Lys	Ser	Ser	Asp	Lys	Leu	Asn	Leu	Val	Thr	Lys	Thr	Lys	Thr	Asp
		260				265						270			
Pro	Ala	Lys	Thr	Leu	Gly	Thr	Pro	Leu	Cys	Pro	Arg	Met	Glu	Asp	Val
	275					280						285			
Pro	Leu	Glu	Pro	Leu	Ile	Cys	Lys	Lys	Ile	Ala	His	Glu	Arg	Leu	
	290				295				300						
Thr	Val	Leu	Ile	Phe	Leu	Glu	Asp	Cys	Ile	Val	Thr	Ala	Cys	Gln	Glu

&lt;210&gt; 4935

&lt;211&gt; 1668

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4935

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<210> 4934

<211> 181

<212> PRT

<213> Homo sapiens

<400> 4934

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			20					25					30		
Ala	Tyr	Ile	Glu	Ser	Gln	Gly	Ala	His	Arg	Ala	Gly	Leu	Ala	Lys	Ile
		35					40					45			
Ile	Pro	Pro	Lys	Glu	Trp	Lys	Pro	Arg	Gln	Thr	Tyr	Asp	Asp	Ile	Asp
		50				55					60				
Asp	Val	Val	Ile	Pro	Ala	Pro	Ile	Gln	Gln	Val	Val	Thr	Gly	Gln	Ser
65				70					75					80	
Gly	Leu	Phe	Thr	Gln	Tyr	Asn	Ile	Gln	Lys	Lys	Ala	Met	Thr	Val	Gly
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&lt;213&gt; Homo sapiens

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&lt;211&gt; 5907

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&lt;213&gt; Homo sapiens

&lt;400&gt; 4929

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&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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Ile	Gln	Leu	Ser	Gly	Ala	Glu	Gln	Leu	Glu	Ala	Leu	Lys	Ala	Phe	Val
		35					40					45			
Glu	Ala	Met	Val	Asn	Glu	Asn	Val	Ser	Leu	Val	Ile	Ser	Arg	Gln	Leu
		50				55					60				
Leu	Thr	Asp	Phe	Cys	Thr	His	Leu	Pro	Asn	Leu	Pro	Asp	Ser	Thr	Ala
65				70					75					80	
Lys	Glu	Ile	Tyr	His	Phe	Thr	Leu	Glu	Lys	Ile	Gln	Pro	Arg	Val	Ile
			85						90					95	
Ser	Phe	Glu	Glu	Gln	Val	Ala	Ser	Ile	Arg	Gln	His	Leu	Ala	Ser	Ile
		100						105				110			
Tyr	Glu	Lys	Glu	Glu	Asp	Trp	Arg	Asn	Ala	Ala	Gln	Val	Leu	Val	Gly
		115					120					125			
Ile	Pro	Leu	Glu	Thr	Gly	Gln	Lys	Gln	Tyr	Asn	Val	Asp	Tyr	Lys	Leu
		130				135					140				
Glu	Thr	Tyr	Leu	Lys	Ile	Ala	Arg	Leu	Tyr	Leu	Glu	Asp	Asp	Asp	Pro
145				150					155					160	
Val	Gln	Ala	Glu	Ala	Tyr	Ile	Asn	Arg	Ala	Ser	Leu	Leu	Gln	Asn	Glu
			165					170						175	
Ser	Thr	Asn	Glu	Gln	Leu	Gln	Ile	His	Tyr	Lys	Val	Cys	Tyr	Ala	Arg

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      1             5             10             15
Glu Phe Gly Asp Gly Ser Asp Glu Asn Glu Met Glu Glu His Glu Leu
      20             25             30
Lys Asp Glu Asp Gly Lys Asp Ser Asp Glu Ala Glu Asp Ala Glu
      35             40             45
Leu Tyr Asp Asp Leu Tyr Cys Pro Ala Cys Asp Lys Ser Phe Lys Thr
      50             55             60
Glu Lys Ala Met Lys Asn His Glu Lys Ser Lys Lys His Arg Glu Met
      65             70             75             80
Val Ala Leu Leu Lys Gln Gln Leu Glu Glu Glu Glu Glu Asn Phe Ser
      85             90             95
Arg Pro Gln Ile Asp Glu Asn Pro Leu Asp Asp Asn Ser Glu Glu Glu
      100            105            110
Met Glu Asp Ala Pro Lys Gln Lys Leu Ser Lys Lys
      115            120

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&lt;210&gt; 4927

&lt;211&gt; 1649

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4927

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120
attcagttat ctggagcaga acaactagaa gctttgaaag cttttgtgga agcaatggta
180
aatgagaatg tcagtctcgt gatctcgagg cagttgctga ctgatttttg cacacatctt
240
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300
cctagagtca tttcatttga ggagcagggt gcttcataa gacagcatct tgcatttata
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420
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480
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540
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600
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660
aagacaatag tccacgaaag tgaagacta gaggccttaa aacatgcttt gcaactgtacg
720
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960

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50		55		60
Ser Met Ala Ser Ile Gly Lys Gly Pro Leu Pro Leu Ser Phe Ser Arg				
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Ala Gly Gly Trp Pro Pro Thr Lys Ala Lys Asn Ser Ala Ser Ser Ser				
	85	90	95	
Ser Ser Leu Ala Pro Ser Ser Gly Ile Ile Arg Pro Ser Gly Glu Arg				
	100	105	110	
Ser Thr Ser Arg Pro Ser Trp Arg Ala Ala Ala Ala Pro Leu Pro Gly				
	115	120	125	
Gly Pro Gly Gly Pro Ser Ser Cys Ala Ser Ser Arg Leu Asp Ala Arg				
	130	135	140	
Thr Thr Cys Pro Gln Ala Arg Pro Cys Pro Ala Pro Ser Pro Gly Ser				
145	150	155	160	
Val Ala Ala His Ser Pro Phe Leu Ser Pro Ala Leu Leu Val Gly Ala				
	165	170	175	
Leu Arg Pro Val Asp Pro Glu Pro Ser Leu Pro Cys Leu Ala Val Pro				
	180	185	190	
Leu Pro Pro Arg Ala Ser Gly Ala Ala Ala Pro Xaa Ser Ala Ala Ser				
	195	200	205	
Trp Ala Arg Arg Gly Leu Pro Ser Arg Asn Tyr Asn Ser Arg Gln Ile				
	210	215	220	
Ser Gln Gly Glu Asp Lys Met Thr Lys Arg Lys Lys Leu Arg Thr Ser				
225	230	235	240	
Ala Pro Leu Met Arg Lys Gln Asp Leu Pro Ala Gly Ser Ser Val				
	245	250	255	

&lt;210&gt; 4925

&lt;211&gt; 374

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4925

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120

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tcgttcaaga cagaaaaggc catgaagaat cacgagaagt caaagaagca tcgggaaatg

240

gtggccttgc taaaacaaca gctggaggag gaagaagaaa atttttcaag acctcaaatt

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360

ctttctaaaa aaaa

374

&lt;210&gt; 4926

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4926

Ala Asn Leu Glu Lys Glu Leu Gln Glu Met Glu Ala Arg Tyr Glu Lys

290                                      295                                      300  
 Thr Gly Glu Val Glu Glu Met Thr Glu Lys Pro Glu Met Thr Ala Glu  
 305                                      310                                      315                                      320  
 Glu Lys Gln Thr Leu Leu Lys Arg Arg Leu Leu Ala Glu Lys Leu Lys  
                                     325                                      330                                      335  
 Glu Glu Val Ile Asn Lys  
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<210> 4923

<211> 765

<212> DNA

<213> Homo sapiens

<400> 4923

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<210> 4924

<211> 255

<212> PRT

<213> Homo sapiens

<400> 4924

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                                     20                                      25                                      30  
 Ser Ala Ser Arg Ser Ser Ser Ala Ser Lys Ser Ser Ser Ser Val Pro  
                                     35                                      40                                      45  
 Ser Ser Ser Ser Ser Ser Gly Ser Leu Met His Arg Leu Ala Ile Phe

actaaacaga tacaaaatat ggagcagaaa ggaaaaccca ctgggggaggt agaggaaatg  
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 1140  
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<210> 4922

<211> 342

<212> PRT

<213> Homo sapiens

<400> 4922

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		20						25					30		
Val	Glu	Gln	Lys	Cys	Glu	Val	Phe	Asp	Asp	Glu	Glu	Glu	Ser	Lys	Leu
		35					40						45		
Thr	Tyr	Thr	Glu	Ile	His	Gln	Glu	Tyr	Lys	Glu	Leu	Val	Glu	Lys	Leu
	50					55					60				
Leu	Glu	Gly	Tyr	Leu	Lys	Glu	Ile	Gly	Ile	Asn	Glu	Asp	Gln	Phe	Gln
65					70					75				80	
Glu	Ala	Cys	Thr	Ser	Pro	Leu	Ala	Lys	Thr	His	Thr	Ser	Gln	Ala	Ile
				85					90					95	
Leu	Gln	Pro	Val	Leu	Ala	Ala	Glu	Asp	Phe	Thr	Ile	Phe	Lys	Ala	Met
		100						105					110		
Met	Val	Gln	Lys	Asn	Ile	Glu	Met	Gln	Leu	Gln	Ala	Ile	Arg	Ile	Ile
		115					120						125		
Gln	Glu	Arg	Asn	Gly	Val	Leu	Pro	Asp	Cys	Leu	Thr	Asp	Gly	Ser	Asp
	130					135						140			
Val	Val	Ser	Asp	Leu	Glu	His	Glu	Glu	Met	Lys	Ile	Leu	Arg	Glu	Val
145					150					155				160	
Leu	Arg	Lys	Ser	Lys	Glu	Glu	Tyr	Asp	Gln	Glu	Glu	Glu	Arg	Lys	Arg
				165					170					175	
Lys	Lys	Gln	Leu	Ser	Glu	Ala	Lys	Thr	Glu	Glu	Pro	Thr	Val	His	Ser
			180					185					190		
Ser	Glu	Ala	Ala	Ile	Met	Asn	Asn	Ser	Gln	Gly	Asp	Gly	Glu	His	Phe
		195					200					205			
Ala	His	Pro	Pro	Ser	Glu	Val	Lys	Met	His	Phe	Ala	Asn	Gln	Ser	Ile
	210						215					220			
Glu	Pro	Leu	Gly	Arg	Lys	Val	Glu	Arg	Ser	Glu	Thr	Ser	Ser	Leu	Pro
225					230					235				240	
Gln	Lys	Gly	Leu	Lys	Ile	Pro	Gly	Leu	Glu	His	Ala	Ser	Ile	Glu	Gly
				245						250				255	
Pro	Ile	Ala	Asn	Leu	Ser	Val	Leu	Gly	Thr	Glu	Glu	Leu	Arg	Gln	Arg
			260					265					270		
Glu	His	Tyr	Leu	Lys	Gln	Lys	Arg	Asp	Lys	Leu	Met	Ser	Met	Arg	Lys
		275					280						285		
Asp	Met	Arg	Thr	Lys	Gln	Ile	Gln	Asn	Met	Glu	Gln	Lys	Gly	Lys	Pro

	100		105		110										
Gln	Asp	Ser	Gly	Leu	Gln	Glu	Ser	Glu	Val	Ser	Ala	Glu	Asn	Ile	Leu
	115		120		125										
Thr	Val	Ala	Lys	Asp	Pro	Arg	Tyr	Ala	Arg	Tyr	Leu	Lys	Met	Val	Gln
	130		135		140										
Val	Gly	Val	Pro	Val	Met	Ala	Ile	Arg	Asn	Lys	Met	Ile	Ser	Glu	Gly
	145		150		155										
Leu	Asp	Pro	Asp	Leu	Leu	Glu	Arg	Pro	Asp	Ala	Pro	Val	Pro	Asp	Gly
	165		170		175										
Glu	Ser	Glu	Lys	Thr	Val	Glu	Glu	Ser	Ser	Asp	Ser	Glu	Ser	Ser	Phe
	180		185		190										
Ser	Asp														

&lt;210&gt; 4921

&lt;211&gt; 1272

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4921

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180
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240
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300
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720
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840
gaaaggtctg aaacttcctc cctcccacaa aaaggcctga agattcctgg cttagagcat
900
gcgagcattg aaggaccaat agcaaactta tcagtacttg gaacagaaga acttcggcaa
960
cgagaacact atctcaagca gaagagagat aagttgatgt ccatgagaaa ggatatgagg
1020

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 480  
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 780  
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 1080  
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 1362

&lt;210&gt; 4920

&lt;211&gt; 194

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4920

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Lys	Val	Pro	Ala	Ile	Gln	Gln	Lys	Arg	Thr	Val	Ala	Phe	Leu	Asn	Gln
			20				25					30			
Phe	Val	Val	His	Thr	Val	Gln	Phe	Leu	Asn	Arg	Phe	Ser	Thr	Val	Cys
		35				40				45					
Glu	Glu	Lys	Leu	Ala	Asp	Leu	Ser	Leu	Arg	Ile	Gln	Gln	Ile	Glu	Thr
	50				55				60						
Thr	Leu	Asn	Ile	Leu	Asp	Ala	Lys	Leu	Ser	Ser	Ile	Pro	Gly	Leu	Asp
65				70				75				80			
Asp	Val	Thr	Val	Glu	Val	Ser	Pro	Leu	Asn	Val	Thr	Ser	Val	Thr	Asn
			85				90				95				
Gly	Ala	His	Pro	Glu	Ala	Thr	Ser	Glu	Gln	Pro	Gln	Gln	Asn	Ser	Thr

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Ser	Glu	Ala	Asp	Pro	Ala	Pro	Leu	Leu	Gly	Gly	Arg	Leu	Leu	Leu
				85					90				95	
Asp	Val	Val	Asp	Ala	Glu	Gln	Glu	Ala	Pro	Ala	Asp	Gly	Trp	Ile
			100					105					110	Ala
Val	Ala	Tyr	Val	Gly	Lys	Glu	Gln	Ala	Ala	Gln	Phe	His	Gln	Glu
		115					120					125		Asn
Lys	Gly	Ser	Gly	Pro	Gln	Ala	Tyr	Pro	Lys	Ala	Leu	Val	Gln	Gln
	130					135					140			Met
Arg	Arg	Ala	Leu	Phe	Leu	Gly	Ala	Ser	Ala	Leu	Leu	Leu	Leu	Ile
	145				150					155				Leu
Asn	His	Asn	Val	Val	Arg	Glu	Leu	Asp	Ile	Ser	Gln	Leu	Leu	Leu
			165						170					Arg
Pro	Val	Ile	Val	Leu	His	Tyr	Ser	Ser	Asn	Val	Thr	Lys	Leu	Leu
		180						185					190	Asp
Ala	Leu	Leu	Gln	Arg	Thr	Gln	Ala	Thr	Ala	Glu	Ile	Thr	Ser	Gly
		195					200					205		Glu
Ser	Leu	Ser	Ala	Asn	Ile	Glu	Trp	Lys	Leu	Thr	Leu	Trp	Thr	Thr
	210					215					220			Cys
Gly	Leu	Ser	Lys	Asp	Gly	Tyr	Gly	Gly	Trp	Gln	Asp	Leu	Val	Cys
	225				230					235				Leu
Gly	Gly	Ser	Arg	Ala	Gln	Glu	Gln	Lys	Pro	Leu	Gln	Gln	Leu	Trp
			245						250				255	Asn
Ala	Ile	Leu	Leu	Val	Ala	Met	Leu	Leu	Cys	Thr	Gly	Leu	Val	Gln
		260						265					270	
Ala	Gln	Arg	Gln	Ala	Ser	Arg	Gln	Ser	Gln	Arg	Glu	Leu	Gly	Gln
	275						280					285		
Val	Asp	Leu	Phe	Lys	Arg	Arg	Val	Val	Arg	Arg	Leu	Ala	Ser	Leu
	290					295					300			Lys
Thr	Arg	Arg	Cys	Arg	Leu	Ser	Arg	Ala	Ala	Gln	Gly	Leu	Pro	Asp
	305				310					315				Pro
Gly	Ala	Glu	Thr	Cys	Ala	Val	Cys	Leu	Asp	Tyr	Phe	Cys	Asn	Lys
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&lt;210&gt; 4919

&lt;211&gt; 1362

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4919

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120

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180

agaacggtgg cttttctaaa ccaatttggtg gtgcacactg tacagttcct caaccgcttt

240

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300

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360

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&lt;210&gt; 4918

&lt;211&gt; 347

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4918

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 Pro Pro Pro Pro Ser Pro Leu Leu Leu Leu Leu Pro Leu Leu Pro Leu  
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 Trp Leu Gly Leu Ala Gly Pro Gly Ala Ala Ala Asp Gly Ser Glu Pro  
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 Ala Ala Gly Ala Gly Arg Gly Gly Ala Arg Ala Val Arg Val Asp Val  
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 Arg Leu Pro Arg Gln Asp Ala Leu Val Leu Glu Gly Val Arg Ile Gly

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<210> 4916

<211> 59

<212> PRT

<213> Homo sapiens

<400> 4916

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Ala	Gly	Ala	Ser	Arg	Lys	Arg	Lys	Glu	Val	Pro	Ser	Arg	Leu	Arg	Thr
			20					25					30		
Trp	Gly	Pro	Gly	Gly	Asp	Ala	Pro	Arg	Gly	Ser	Gly	Leu	Lys	Arg	Pro
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<210> 4917

<211> 1544

<212> DNA

<213> Homo sapiens

<400> 4917

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 240  
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 300  
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 360  
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 420

340 345 350  
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 Glu Phe Phe Asn Asp Thr Thr Ala Phe Tyr Ile Ile Leu Ile Val  
 370 375 380  
 Trp Leu Ala Asp Gln Tyr Asp Ala Ile Cys Cys His Thr Ser Thr Ser  
 385 390 395 400  
 Lys Arg His Trp Leu Arg Phe Phe Tyr Leu Tyr His Phe Ala Phe Tyr  
 405 410 415  
 Ala Tyr His Tyr Arg Phe Asn Gly Gln Tyr Ser Ser Leu Ala Leu Val  
 420 425 430  
 Thr Ser Trp Leu Phe Ile Gln His Ser Met Ile Tyr Phe Phe His His  
 435 440 445  
 Tyr Glu Leu Pro Ala Ile Leu Gln Gln Val Arg Ile Gln Glu Met Leu  
 450 455 460  
 Leu Gln Ala Pro Pro Leu Gly Pro Gly Thr Pro Thr Ala Leu Pro Asp  
 465 470 475 480  
 Asp Met Asn Asn Asn Ser Gly Ala Pro Ala Thr Ala Pro Asp Ser Ala  
 485 490 495  
 Gly Gln Pro Pro Ala Leu Gly Pro Val Phe Glu Leu Val Ser Lys Glu  
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 Gln

&lt;210&gt; 4915

&lt;211&gt; 1157

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4915

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120

tctcagtcac caagactgca ggagaggcaa ggccatgtca ggccctggcag ctgtggctgg  
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ggccaggagg gagggaccag gcccatgtgg gaacaggaca aatgcccag gccacatcct  
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aagctgtctt ggccactgtc cgcagaacgc cggatgcggg tgcagaaaga ctgcgtccag  
660

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<210> 4914

<211> 529

<212> PRT

<213> Homo sapiens

<400> 4914

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			20					25					30		
Asn	Pro	Asn	Pro	Leu	Ile	Asn	Val	Arg	Asp	Arg	Leu	Phe	His	Ala	Leu
		35					40					45			
Phe	Phe	Lys	Met	Ala	Val	Thr	Tyr	Ser	Arg	Leu	Phe	Pro	Pro	Ala	Phe
	50					55					60				
Arg	Arg	Leu	Phe	Glu	Phe	Phe	Val	Leu	Leu	Lys	Ala	Leu	Phe	Val	Leu
65					70					75				80	
Phe	Val	Leu	Ala	Tyr	Ile	His	Ile	Val	Phe	Ser	Arg	Ser	Pro	Ile	Asn
				85					90					95	
Cys	Leu	Glu	His	Val	Arg	Asp	Lys	Trp	Pro	Arg	Glu	Gly	Ile	Leu	Arg
			100					105					110		
Val	Glu	Val	Arg	His	Asn	Ser	Ser	Arg	Ala	Pro	Val	Phe	Leu	Gln	Phe
		115					120					125			
Cys	Asp	Ser	Gly	Gly	Arg	Gly	Ser	Phe	Pro	Gly	Leu	Ala	Val	Glu	Pro
	130					135					140				
Gly	Ser	Asn	Leu	Asp	Met	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Leu	Thr	Met
145					150					155				160	
Glu	Met	Phe	Gly	Asn	Ser	Ser	Ile	Lys	Phe	Glu	Leu	Asp	Ile	Glu	Pro
			165					170					175		
Lys	Val	Phe	Lys	Pro	Pro	Ser	Ser	Thr	Glu	Ala	Leu	Asn	Asp	Ser	Gln
		180						185					190		
Glu	Phe	Pro	Phe	Pro	Glu	Thr	Pro	Thr	Lys	Val	Trp	Pro	Gln	Asp	Glu
	195						200					205			
Tyr	Ile	Val	Glu	Tyr	Ser	Leu	Glu	Tyr	Gly	Phe	Leu	Arg	Leu	Ser	Gln
	210					215					220				
Ala	Thr	Arg	Gln	Arg	Leu	Ser	Ile	Pro	Val	Met	Val	Val	Thr	Leu	Asp
225					230					235				240	
Pro	Thr	Arg	Asp	Gln	Cys	Phe	Gly	Asp	Arg	Phe	Ser	Arg	Leu	Leu	Leu
			245					250					255		
Asp	Glu	Phe	Leu	Gly	Tyr	Asp	Asp	Ile	Leu	Met	Ser	Ser	Val	Lys	Gly
		260						265					270		
Leu	Ala	Glu	Asn	Glu	Glu	Asn	Lys	Gly	Phe	Leu	Arg	Asn	Val	Val	Ser
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Gly	Glu	His	Tyr	Arg	Phe	Val	Ser	Met	Trp	Met	Ala	Arg	Thr	Ser	Tyr
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Leu	Ala	Ala	Phe	Ala	Ile	Met	Val	Ile	Phe	Thr	Leu	Ser	Val	Ser	Met
305					310					315				320	
Leu	Leu	Arg	Tyr	Ser	His	His	Gln	Ile	Phe	Val	Phe	Ile	Val	Asp	Leu
			325					330					335		
Leu	Gln	Met	Leu	Glu	Met	Asn	Met	Ala	Ile	Ala	Phe	Pro	Ala	Ala	Pro

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1860  
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<210> 4913
<211> 2090
<212> DNA
<213> Homo sapiens
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120
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360
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<210> 4912

<211> 453

<212> PRT

<213> Homo sapiens

<400> 4912

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			20					25					30		
Leu	Lys	Ala	Ile	Leu	Ile	Gln	Arg	Gln	Ile	Asp	Val	Asp	Thr	Val	Phe
		35				40					45				
Glu	Val	Glu	Asp	Glu	Asn	Met	Val	Leu	Ala	Ser	Tyr	Lys	Gln	Gly	Tyr
	50				55					60					
Trp	Leu	Pro	Ser	Tyr	Lys	Leu	Lys	Ser	Ser	Trp	Ala	Thr	Gly	Leu	His
65				70					75					80	
Leu	Ser	Val	Leu	Phe	Gly	His	Val	Glu	Cys	Leu	Leu	Val	Leu	Leu	Asp
			85					90					95		
His	Asn	Ala	Thr	Ile	Asn	Cys	Arg	Pro	Asn	Gly	Lys	Thr	Pro	Leu	His
		100						105					110		
Val	Ala	Cys	Glu	Met	Ala	Asn	Val	Asp	Cys	Val	Lys	Ile	Leu	Cys	Asp
		115				120					125				
Arg	Gly	Ala	Lys	Leu	Asn	Cys	Tyr	Ser	Leu	Ser	Gly	His	Thr	Ala	Leu
	130				135						140				
His	Phe	Cys	Thr	Thr	Pro	Ser	Ser	Ile	Leu	Cys	Ala	Lys	Gln	Leu	Val
145				150					155					160	
Trp	Arg	Val	Thr	Gln	Val	Asn	His	Met	Leu	Gly	Asn	Ser	Leu	Val	Asn
			165					170					175		
Glu	Val	Glu	His	Val	Thr	Gln	Val	Asn	His	Met	Leu	Gly	Asn	Ser	Leu

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Phe Thr Val Ser Gly Ile Gln Val Arg Tyr Met Lys Ile Ile Glu Lys
385              390              395              400
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      405              410              415
Asp Tyr Gln Leu Arg Thr Ser
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<210> 4911
<211> 1862
<212> DNA
<213> Homo sapiens

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180
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240
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1080
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<210> 4910  
 <211> 423  
 <212> PRT  
 <213> Homo sapiens

<400> 4910

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Phe Met Pro Ile Leu Met Glu Lys Glu Glu Glu Gly Met Leu Ser Pro
 35           40           45
Ile Leu Ala His Gly Gly Val Arg Phe Met Trp Ile Lys His Asn Asn
 50           55           60
Leu Tyr Leu Val Ala Thr Ser Lys Lys Asn Ala Cys Val Ser Leu Val
 65           70           75           80
Phe Ser Phe Leu Tyr Lys Val Val Gln Val Phe Ser Glu Tyr Phe Lys
 85           90           95
Glu Leu Glu Glu Glu Ser Ile Arg Asp Asn Phe Val Ile Ile Tyr Glu
 100          105          110
Leu Leu Asp Glu Leu Met Asp Phe Gly Phe Pro Gln Thr Thr Asp Ser
 115          120          125
Lys Ile Leu Gln Glu Tyr Ile Thr Gln Gln Ser Asn Lys Leu Glu Thr
 130          135          140
Gly Lys Ser Arg Val Pro Pro Thr Val Thr Asn Ala Val Ser Trp Arg
 145          150          155          160
Ser Glu Gly Ile Lys Tyr Lys Lys Asn Glu Val Phe Ile Asp Val Ile
 165          170          175
Glu Ser Val Asn Leu Leu Val Asn Ala Asn Gly Ser Val Leu Leu Ser
 180          185          190
Glu Ile Val Gly Thr Ile Lys Met Arg Val Phe Leu Ser Gly Met Pro
 195          200          205
Glu Leu Arg Leu Gly Leu Asn Asp Lys Val Leu Phe Asp Asn Thr Gly
 210          215          220
Arg Gly Lys Ser Lys Ser Val Glu Leu Glu Asp Val Lys Phe His Gln
 225          230          235          240
Cys Val Arg Leu Ser Arg Phe Glu Asn Asp Arg Thr Ile Ser Phe Ile
 245          250          255
Pro Pro Asp Gly Glu Phe Glu Leu Met Ser Tyr Arg Leu Asn Thr His
 260          265          270
Val Lys Pro Leu Ile Trp Ile Glu Ser Val Ile Glu Lys Phe Ser His
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Ser Arg Ile Glu Tyr Met Val Lys Ala Lys Gly Gln Phe Lys Lys Gln
 290          295          300
Ser Val Ala Asn Gly Val Glu Ile Ser Val Pro Val Pro Ser Asp Ala
 305          310          315          320
Asp Ser Pro Arg Phe Lys Thr Ser Val Gly Ser Ala Lys Tyr Val Pro
 325          330          335
Glu Arg Asn Val Val Ile Trp Ser Ile Lys Ser Phe Pro Gly Gly Lys
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Glu Tyr Leu Met Arg Ala His Phe Gly Leu Pro Ser Val Glu Lys Glu
 355          360          365
Glu Val Glu Gly Arg Pro Pro Ile Gly Val Lys Phe Glu Ile Pro Tyr
  
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1960

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 1260  
 ggctggcgat cgcctctctc tccatctcct cgggggaggg cgcgcgcacg gccacgccgc  
 1320  
 cgcggctccc cctccncggc ttccaactct ccttcgtcgc caaactgctg cttgcggccg  
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 ggagatccgg ccgccgccgt ctctctctcc cccgctgcag cccgggtcag gtcagagggc  
 1440  
 agcgaacaag ttgcagccgg ctccgggctc tcaactgcggg ttggggagtt gctgcccag  
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 gctgccagca gcttggtcag gctatgcctc atgagggcca cgggcggccg cggtagcccc  
 1560  
 ggccgctaag agtggctcac gggccccaag gatcccaggc cccagggcgg gtagccccc  
 1620  
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 1740  
 accgcgcc  
 1748

&lt;210&gt; 4908

&lt;211&gt; 55

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4908

Glu	Lys	Thr	Thr	Pro	Ser	Gly	Arg	Thr	Pro	Ser	Arg	Thr	Pro	Pro	Thr
1				5				10					15		
Pro	Tyr	Pro	Cys	Pro	His	Gly	Asp	Arg	Leu	Leu	Pro	Pro	Ser	Arg	Pro
			20				25						30		
Leu	Pro	Ala	Gly	Pro	Ala	Ser	Ala	Phe	Pro	Pro	Ala	Glu	Arg	Ser	Arg
		35					40					45			
Gly	His	Arg	Arg	Ala	Ser	Leu									
	50					55									

&lt;210&gt; 4909

&lt;211&gt; 1960

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4909

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 aggggtggcca gagaccaggg agggcccctc catctggtgg gtttggcagg tgtgtcccc  
 120  
 cgcggctccc cgaaccggaa gtggaggatga gctgtgcggg gcggcgcccc gccttgctca  
 180  
 acgccagca gtccccaccg tcgtgcccgc cgccaccgcc ctgggccgt gccgaggcct  
 240  
 cctgcagcca tcatgtccgc cagcgcgcgc tacgtgctgg acctgaaggg caaggtgctc  
 300  
 atctgccgga actaccgtgg cgacgtggac atgtcagagg tggagcactt catgcccatc  
 360

	85		90		95										
Pro	Arg	Gly	Ser	Pro	Ala	Ser	Ala	Leu	Val	Leu	Ala	Phe	Gly	Gly	Asn
	100		105		110										
Pro	Leu	His	Cys	Asn	Cys	Glu	Leu	Val	Trp	Leu	Arg	Arg	Leu	Ala	Arg
	115		120		125										
Glu	Asp	Asp	Leu	Glu	Ala	Cys	Ala	Ser	Pro	Pro	Ala	Leu	Gly	Gly	Arg
	130		135		140										

&lt;210&gt; 4907

&lt;211&gt; 1748

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4907

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120
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180
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240
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300
cattcatgct ttagctaaa cactttaaga ttcaatatta ctttttttct ctctctgaa
360
atgtgtccgg tgaagatgtc cactaaggt aagtttgaca tgggtgaagg gagttgaaag
420
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480
tccgggcgca cgccgagcag aactccaccg acaccttacc cttgtccaca tggagacaga
540
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600
cgtagtcgtg gtcaccggcg ggcgagtctc tgaagagcga ggtggtcagc cgcagtccca
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720
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780
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840
ccttcttctt cagtcgatta aggcgggag cgcccgccgc cgccttcgg ggactctttg
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1080
tcacgtcat cgtccctct ccacaggccg ccgctatccg agcctccgcc agacgaggag
1140
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1200

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50                      55                      60  
 Gln Leu Tyr Lys Glu Glu Gly Asn Gln Arg Tyr Arg Glu Gly Lys Tyr  
 65                      70                      75                      80  
 Arg Asp Ala Val Ser Arg Tyr His Arg Ala Leu Leu Gln Leu Arg Gly  
                     85                      90                      95  
 Leu Asp Pro Xaa Ser Ala Leu Ser Val Thr  
                     100                      105

<210> 4905  
 <211> 615  
 <212> DNA  
 <213> Homo sapiens

<400> 4905  
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 120  
 tgccccggcg tccagcgagg gtggcacgaa caggaggcct gcccctgggc acagcacgct  
 180  
 taggggcagc gactgtgtct ggcagcgcca gcggcgggga catgggctgg gtgtgccgag  
 240  
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 300  
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 360  
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 420  
 accacaatcc caccgcagcc actcttctcc cgctgcccc tgetcgccag gccccggggc  
 480  
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 600  
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 615

<210> 4906  
 <211> 144  
 <212> PRT  
 <213> Homo sapiens

<400> 4906  
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 1                      5                      10                      15  
 Cys Ala Glu Thr Leu Glu Asp Leu Asp Leu Ser Tyr Asn Asn Leu Glu  
                     20                      25                      30  
 Gln Leu Pro Trp Glu Ala Leu Gly Arg Leu Gly Asn Val Asn Thr Leu  
                     35                      40                      45  
 Gly Leu Asp His Asn Leu Leu Ala Ser Val Pro Ala Gly Ala Phe Ser  
 50                      55                      60  
 Arg Leu His Lys Leu Ala Arg Leu Asp Met Thr Ser Asn Arg Leu Thr  
 65                      70                      75                      80  
 Thr Ile Pro Pro Asp Pro Leu Phe Ser Arg Leu Pro Leu Leu Ala Arg

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4903

```

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120
tcattattcc cacatccctt tccttactac ttgcctgcac ttcttgagaa aaagactgca
180
gaaaggagag gtgggggcttt cagtagaaac aagcaaaccg cagtcctgt ggggggactc
240
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300
gctcagctgt acaaggagga agggaaccag cgctaccggg aagggaagta ccgagatgct
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420
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aatgccaaagg ccttgatcg ggccggagtg gcctttttcc atctgcagga ctatgaccag
660
gcccgccact acctcctggc tgccgtgaat aggcagccta aagatgcca cgtccggcgg
720
tacctccagc tgacacagtc agaactcagc agctaccata gaaaagagaa gcagctctac
780
ctgggcatgt ttggttaaca aagaagaaag atgctcctcc agttgaactt aggtggacca
840
ttaaactatgc atgaaggaga aatctgagcc tcagcaagag aaattaaccc tatacctctg
900
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960
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1020
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1064

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&lt;210&gt; 4904

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4904

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Cys Trp Ala Ser Leu Phe Pro His Pro Phe Pro Tyr Tyr Leu Pro Ala
 1           5           10          15
Leu Leu Glu Lys Lys Thr Ala Glu Arg Arg Gly Gly Ala Phe Ser Arg
          20          25          30
Asn Lys Gln Thr Ala Val Pro Val Gly Gly Leu Ser Arg Lys Lys Val
          35          40          45
Pro Gln Glu Pro Trp Ala Thr Val Met Glu Lys Arg Leu Gln Glu Ala

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 1020  
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 1080  
 agctctttga aacatccagc aagacaggcc agagtgtggg tgagtgtgtg gctggagcct  
 1140  
 cacagcagga acatgcaggg gcaccagagg aagctgaata gggcacagag ggctgggtca  
 1200  
 ctgggagatc ccagggctac tggcattggg ccctcgctga tcatcatttt tcttgccaga  
 1260  
 cgagctcttc cagaaagtgg cagaggatta cgtcagtgtg gctgccttcc aggtgatgac  
 1320  
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 1380  
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 1440  
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 1500  
 cagagtggcg cctgcctgtc  
 1520

&lt;210&gt; 4902

&lt;211&gt; 184

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4902

Met	Ser	Gly	Gln	Arg	Val	Asp	Val	Lys	Val	Val	Met	Leu	Gly	Lys	Glu
1				5				10						15	
Tyr	Val	Gly	Lys	Thr	Ser	Leu	Val	Glu	Arg	Tyr	Val	His	Asp	Arg	Phe
			20					25					30		
Leu	Val	Gly	Pro	Tyr	Gln	Asn	Thr	Ile	Gly	Ala	Ala	Phe	Val	Ala	Lys
		35				40						45			
Val	Met	Ser	Val	Gly	Asp	Arg	Thr	Val	Thr	Leu	Gly	Ile	Trp	Asp	Thr
	50				55					60					
Ala	Gly	Ser	Glu	Arg	Tyr	Glu	Ala	Met	Ser	Arg	Ile	Tyr	Tyr	Arg	Gly
65				70				75						80	
Ala	Lys	Ala	Ala	Ile	Val	Cys	Tyr	Asp	Leu	Thr	Asp	Ser	Ser	Ser	Phe
			85					90					95		
Glu	Arg	Ala	Lys	Phe	Trp	Val	Lys	Glu	Leu	Arg	Ser	Leu	Glu	Glu	Gly
		100					105					110			
Cys	Gln	Ile	Tyr	Leu	Cys	Gly	Thr	Lys	Ser	Asp	Leu	Leu	Glu	Glu	Asp
	115					120						125			
Arg	Arg	Arg	Arg	Arg	Val	Asp	Phe	His	Asp	Val	Gln	Asp	Tyr	Ala	Asp
	130				135					140					
Ser	Ser	Cys	Ser	Ser	Ala	Leu	Trp	Gly	Val	Gly	Val	Cys	Gly	Cys	Leu
145				150				155						160	
Gly	Gly	Ser	Lys	Lys	Ile	Gly	Thr	Ala	Leu	Ala	Ala	Arg	Ala	Arg	Cys
			165					170					175		
Ser	Arg	Arg	Ser	Ser	Trp	Pro	Pro								
			180												

&lt;210&gt; 4903

&lt;211&gt; 1064

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<210> 4901
<211> 1520
<212> DNA
<213> Homo sapiens
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4076

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1680

agaaggagaa gaccaaggag gaggacgcca ggtgagagca ggtgggtggtc agg  
1733

<210> 4898

<211> 92

<212> PRT

<213> Homo sapiens

<400> 4898

Xaa	Phe	Val	Ala	Arg	Ala	Gly	Val	Gln	Trp	Arg	Asp	Leu	Ser	Ser	Leu
1			5					10					15		
Gln	Pro	Leu	Pro	Leu	Arg	Phe	Lys	Gln	Phe	Ser	Cys	Phe	Ser	Leu	Pro
		20					25				30				
Ser	Ser	Trp	Asp	Tyr	Arg	Arg	Pro	Pro	Arg	Cys	Pro	Ala	Asn	Phe	Cys
		35				40				45					
Ile	Phe	Ser	Lys	Asp	Arg	Val	Ser	Pro	Cys	Trp	Leu	Gly	Trp	Ser	Gln
	50				55				60						
Thr	Pro	Asp	Xaa	Thr	Arg	Leu	Gly	Leu	Pro	Lys	Cys	Trp	Asp	Tyr	Arg
65				70				75					80		
Arg	Glu	Pro	Pro	Arg	Pro	Gly	Asp	Leu	Trp	Asn	Phe				
			85					90							

<210> 4899

<211> 444

<212> DNA

<213> Homo sapiens

<400> 4899

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120  
gtggcggctc tggaggcagc aacgggggtcc tttgggggtgg gtgggagttc tgctggattc  
180  
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240  
ccacagaatc agccagtgcc acggccccac cacagccagg cttggccctg tcagcggcca  
300  
gcatccccgag ggccagggtc cgagtgtcct caccaaggag gctcttggcg tcgctgtgcc  
360  
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420  
attaaactga tggtcaggct ggga  
444

<210> 4900

<211> 118

<212> PRT

<213> Homo sapiens

<400> 4900

Met Gly Thr Asn Val Gly Pro Ala Ala Ser Val Arg Gly Leu Gly Ile

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60  
ctcaggttca agcaattctc ctgcttcagc ctcccaagta gctgggatta caggcgccca  
120  
ccacgatgcc cagctaattt ttgtattttc agtaaagaca gggtttcacc atgttggtta  
180  
ggctgggtctc aaactcctga tncacccgc ctcgccctcc caaagtgtg ggattacagg  
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cgtgaaccac cgcgcccggg tgaccttgg aacttctgac cgactggctt caagttgagg  
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360  
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420  
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480  
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660  
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720  
acaaaagagt gtaacaaggg ctgtgggagt tatgagccag gaactgtgga cgaaaatgaa  
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1620

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 660  
 cacacttagt cttgtaattt caggccagaa attctcaaca ctattttgca tctgttttct  
 720  
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 780  
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<210> 4896

<211> 109

<212> PRT

<213> Homo sapiens

<400> 4896

Met	Glu	Ala	Glu	Val	Asp	Lys	Leu	Glu	Leu	Met	Phe	Gln	Lys	Ala	Glu
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Ser	Asp	Leu	Asp	Tyr	Ile	Gln	Tyr	Arg	Leu	Glu	Tyr	Glu	Ile	Lys	Thr
		20					25				30				
Asn	His	Pro	Asp	Ser	Ala	Ser	Glu	Lys	Asn	Pro	Val	Thr	Leu	Leu	Lys
		35					40				45				
Glu	Leu	Ser	Val	Ile	Lys	Ser	Arg	Tyr	Gln	Thr	Leu	Tyr	Ala	Arg	Phe
	50					55				60					
Lys	Pro	Val	Ala	Val	Glu	Gln	Lys	Glu	Ser	Lys	Ser	Arg	Ile	Cys	Ala
65					70				75					80	
Thr	Val	Lys	Lys	Thr	Met	Asn	Met	Ile	Gln	Lys	Leu	Gln	Lys	Gln	Thr
			85				90							95	
Asp	Leu	Glu	Val	Met	Leu	Ser	Val	Asp	Ser	Cys	His	His			
			100				105								

<210> 4897

<211> 1733

<212> DNA

<213> Homo sapiens

<400> 4897

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 145 150 155 160  
 Lys Gln Val Lys Lys Leu Glu Gln Ala Leu Lys Asp Gly Ser Ala Gly  
 165 170 175  
 Leu Asp Pro Gln Leu Pro Gly Thr Cys Tyr Ser Pro His Cys Pro Pro  
 180 185 190  
 Asp Lys Ala Glu Ala Gly Ser Thr Leu Pro Glu Asn Leu Gly Gly Gly  
 195 200 205  
 Ser Gly Ser Glu Val Ser Gln Arg Val His Pro Ser Asp Leu Glu Gly  
 210 215 220  
 Arg Glu Pro Thr Pro Glu Leu Val Glu Asp Arg Lys Gly Ser Cys Arg  
 225 230 235 240  
 Arg Pro Trp Asp Arg Ser Leu Glu Asn Val Tyr Arg Gly Ser Glu Gly  
 245 250 255  
 Ser Pro Thr Lys Pro Phe Ile Asn Pro Leu Pro Lys Pro Arg Arg Thr  
 260 265 270  
 Phe Lys His Ala Gly Glu Gly Asp Lys Asp Gly Lys Pro Gly Ile Gly  
 275 280 285  
 Phe Arg Lys Glu Lys Arg Asn Leu Pro Pro Leu Pro Ser Leu Pro Pro  
 290 295 300  
 Pro Pro Leu Pro Ser Ser Pro Pro Pro Ser Ser Val Asn Arg Arg Leu  
 305 310 315 320  
 Trp Thr Gly Arg Gln Lys Ser Ser Ala Asp His Arg Lys Ser Tyr Glu  
 325 330 335  
 Phe Glu Asp Leu Leu Gln Ser Ser Ser Glu Ser Ser Arg Val Asp Trp  
 340 345 350  
 Tyr Ala Gln Thr Lys Leu Gly Leu Thr Arg Thr Leu Ser Glu Glu Asn  
 355 360 365  
 Val Tyr Glu Asp Ile Leu Asp Pro Pro Met Lys Glu Asn Pro Tyr Glu  
 370 375 380  
 Asp Ile Glu Leu His Gly Arg Cys Leu Gly Lys Lys Xaa Val Ser  
 385 390 395

&lt;210&gt; 4895

&lt;211&gt; 1087

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4895

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aaagctgagt ctgatctgga ttacattcaa tacaggctgg aatatgaaat caagactaat  
120

catcctgatt cagcaagtga gaaaaatcca gttacactct taaaggaatt gtcagtgata  
180

aagtctcgat atcaaacttt gtatgccgc tttaaaccag ttgctgttga gcagaaagag  
240

agtaagagcc gcatttgtgc tactgtgaaa aagactatga atatgataca aaaactacag  
300

aagcaaacag acctggaggt aatgctttca gttgacagct gtcaccactg actaaagaag  
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<211> 399

<212> PRT

<213> Homo sapiens

<400> 4894

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&lt;210&gt; 4893

&lt;211&gt; 5212

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4893

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&lt;210&gt; 4892

&lt;211&gt; 216

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4892

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&lt;210&gt; 4891

&lt;211&gt; 1998

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4891

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      340              345              350
Glu Thr Leu Lys Arg Glu Gln Ala Gln Cys Asn Lys Ala Ile Asn Ile
      355              360              365
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&lt;210&gt; 4889

&lt;211&gt; 619

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4889

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&lt;210&gt; 4890

&lt;211&gt; 90

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4890

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<210> 4888

<211> 429

<212> PRT

<213> Homo sapiens

<400> 4888

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			85					90						95	
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			100					105					110		
Gln	Asp	Leu	Leu	Tyr	Asp	Leu	Asp	Ile	Asn	Ile	Phe	Asp	Glu	Ile	Asn
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Ser	His	Asn	Asn	Thr	Ser	Val	Ile	Lys	Ser	Asn	Ser	Ser	His	Ser	Val
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Cys	Asp	Glu	Gly	Ala	Ile	Gly	Tyr	Cys	Thr	Asp	His	Glu	Ser	Ser	Ser
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His	His	Asp	Leu	Glu	Gly	Ala	Val	Gly	Gly	Tyr	Tyr	Pro	Glu	Pro	Ser
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Lys	Leu	Cys	His	Leu	Asp	Gln	Ser	Asp	Ser	Asp	Phe	His	Gly	Asp	Leu
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Lys	Ile	Arg	Ser	Arg	Tyr	Leu	Glu	Asp	Pro	Asp	Arg	Thr	Leu	Ser	Arg
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1980

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<210> 4886

<211> 77

<212> PRT

<213> Homo sapiens

<400> 4886

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			20				25						30		
Val	Asn	Phe	Thr	Arg	Xaa	Glu	Trp	Arg	Glu	Leu	Asp	Leu	Ala	Gln	Arg
		35					40					45			
Val	Leu	Tyr	Arg	Asp	Val	Met	Leu	Glu	Asn	Tyr	Arg	Asn	Leu	Val	Ser
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<210> 4887

<211> 2271

<212> DNA

<213> Homo sapiens

<400> 4887

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 360

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Ile Glu Glu Ile Ser Gly Leu Ser Thr Leu Arg Cys Leu Arg Val Leu
65          70          75          80
Leu Leu Gly Lys Asn Arg Ile Lys Lys Ile Ser Asn Leu Glu Asn Leu
          85          90          95
Lys Ser Leu Asp Val Leu Asp Leu His Gly Asn Gln Ile Thr Lys Ile
          100          105          110
Glu Asn Ile Asn His Leu Cys Glu Leu Arg Val Leu Asn Leu Ala Arg
          115          120          125
Asn Phe Leu Ser His Val Asp Asn Leu Asn Gly Leu Asp Ser Leu Thr
          130          135          140
Glu Leu Asn Leu Arg His Asn Gln Ile Thr Phe Val Arg Asp Val Asp
145          150          155          160
Asn Leu Pro Cys Leu Gln His Leu Phe Leu Ser Phe Asn Asn Ile Ser
          165          170          175
Ser Phe Asp Ser Val Ser Cys Leu Ala Asp Ser Ser Ser Leu Ser Asp
          180          185          190
Ile Thr Phe Asp Gly Asn Pro Ile Ala Gln Glu Ser Trp Tyr Lys His
          195          200          205
Thr Val Leu Gln Asn Met Met Gln Leu Arg Gln Leu Asp Met Lys Arg
          210          215          220
Ile Thr Glu Glu Glu Arg Arg Met Ala Ser Val Leu Ala Lys Lys Glu
225          230          235          240
Glu Glu Lys Lys Arg Glu Ser His Lys Gln Ser Leu Leu Lys Glu Lys
          245          250          255
Lys Arg Leu Thr Ile Asn Asn Val Ala Arg Gln Trp Asp Leu Gln Gln
          260          265          270
Arg Val Ala Asn Ile Ala Thr Asn Glu Asp Arg Lys Asp Ser Asp Ser
          275          280          285
Pro Gln Asp Pro Cys Gln Ile Asp Gly Ser Thr Leu Ser Ala Phe Pro
          290          295          300
Glu Glu Thr Gly Pro Leu Asp Ser Gly Leu Asn Asn Ala Leu Gln Gly
305          310          315          320
Leu Ser Val Ile Asp Thr Tyr Leu Val Glu Val Asp Gly Asp Thr Leu
          325          330          335
Ser Leu Tyr Gly Ser Gly Ala Leu Glu Ser Leu Asp Arg Asn Trp Ser
          340          345          350
Val Gln Thr Ala Gly Met Ile Thr Thr Val Ser Phe Thr Phe Ile Glu
          355          360          365
Phe Asp Glu Ile Val Gln Val Leu Pro Lys Leu Lys Ile Lys Phe Pro
          370          375          380
Asn Ser Leu His Leu Lys Phe Lys Glu Thr Asn Leu Val Met Gln Gln
385          390          395          400
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&lt;210&gt; 4885

&lt;211&gt; 489

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4885

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 240  
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 300  
 tcgactctga gatgtcttcg tgccttctg ttggggaaaa acagaatcaa gaaaatctca  
 360  
 aatctggaga atctaaaaag cttagatgtc ttggatcttc atggaaatca gattaccaa  
 420  
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 480  
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 900  
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<210> 4884<211> 410

<212> PRT

<213> Homo sapiens

<400> 4884

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Thr	Lys	Gln	Lys	Leu	Thr	Val	Cys	Pro	Ile	Ile	Asn	Gly	Glu	Asp	His
		20					25						30		
Leu	Arg	Leu	Leu	Asn	Phe	Gln	His	Asn	Phe	Ile	Thr	Arg	Ile	Gln	Asn
		35				40						45			

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 900  
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 960  
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 1333

&lt;210&gt; 4882

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4882

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1				5						10				15	
Arg	Glu	Ala	Thr	Gly	Val	Glu	Asn	Arg	Val	Thr	Ser	Pro	Leu	Pro	Pro
			20					25					30		
Leu	Pro	Phe	Leu	Pro	Ser	Gln	Pro	Leu	Gly	Phe	Gly	Tyr	Met	Thr	Gln
		35					40					45			
Gln	Leu	Met	Asn	Leu	Ala	Gly	Gly	Ala	Val	Val	Leu	Ala	Leu	Glu	Gly
	50					55				60					
Gly	His	Asp	Leu	Thr	Ala	Ile	Cys	Asp	Ala	Ser	Glu	Ala	Cys	Val	Ala
65					70					75				80	
Ala	Leu	Leu	Gly	Asn	Arg	Val	Ser	Arg	Leu	Pro	Pro	Pro	Ser	Met	Leu
				85					90					95	
Leu	Ser	Gly	Arg												
				100											

&lt;210&gt; 4883

&lt;211&gt; 1371

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4883

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Ala Thr Ala Ser Gly Pro His Val Lys Ser His Leu Thr Arg Val Val
      50      55      60
Thr Thr Val Leu Phe Trp Gly Phe Ser Lys Ala Ser Pro Val Val Leu
      65      70      75      80
Arg Gly His Ser Glu Gln Ala Asn Thr Ala Arg Val Thr His Tyr Thr
      85      90      95
Gln Arg Lys Asp Asn Glu Gln Met Ala Ile Val Glu Asn Ser Val Val
      100      105      110
Cys Phe Ser Asn Ala Thr Tyr Phe Ser Arg Gln Val Ile Leu Pro Met
      115      120      125
Met Thr Ser Ala Thr Lys Leu Arg Ala Arg Gly Leu Pro Met Arg Leu
      130      135      140
Val Glu Ser Asn His Val Cys Ser Glu Ala Ser Gly Pro Ser Arg Pro
      145      150      155      160
Cys His Arg Pro Glu His Arg Thr Val Ile Met Gln Arg Ala Val Thr
      165      170      175
Glu Ala Gly Val Ser Val Gly Gly Gly Glu Glu Gly Thr Ser Ala Phe
      180      185      190
Tyr Ile Arg Ser Glu Ala Thr Val Arg Lys
      195      200

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&lt;210&gt; 4881

&lt;211&gt; 1333

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4881

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720

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 1941

&lt;210&gt; 4880

&lt;211&gt; 202

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4880

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His	Lys	Pro	Gly	Leu	Gly	Lys	Cys	Pro	Asp	Leu	Pro	Gly	Gly	His	Thr

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<210> 4878

<211> 122

<212> PRT

<213> Homo sapiens

<400> 4878

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		20					25					30			
Leu	Arg	Asp	Glu	Ser	Val	Ala	His	Gly	Arg	Ile	Asp	Asn	Val	Asp	Ala
		35				40					45				
Phe	Met	Asn	Ile	Arg	Leu	Ala	Lys	Val	Thr	Tyr	Thr	Asp	Arg	Trp	Gly
50					55					60					
His	Gln	Val	Lys	Leu	Asp	Asp	Leu	Phe	Val	Thr	Gly	Arg	Asn	Val	Arg
65				70					75				80		
Tyr	Val	His	Ile	Pro	Asp	Asp	Val	Asn	Ile	Thr	Ser	Thr	Ile	Glu	Gln
			85					90					95		
Gln	Leu	Gln	Ile	Ile	His	Arg	Val	Arg	Asn	Phe	Gly	Gly	Lys	Gly	Gln
		100					105						110		
Gly	Arg	Trp	Glu	Phe	Pro	Pro	Lys	Lys	Leu						
		115					120								

<210> 4879

<211> 1941

<212> DNA

<213> Homo sapiens

<400> 4879

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<210> 4877
<211> 1182
<212> DNA
<213> Homo sapiens
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<210> 4876

<211> 230

<212> PRT

<213> Homo sapiens

<400> 4876

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Ala	Val	His	Glu	Val	Glu	Lys	Trp	Leu	Pro	Arg	Leu	His	Ala	Leu	Val
			20					25					30		
Val	Gly	Thr	Gly	Leu	Gly	Arg	Asp	Asp	Ala	Leu	Leu	Arg	Asn	Val	Gln
			35				40					45			
Gly	Ile	Leu	Glu	Val	Ser	Lys	Ala	Arg	Asp	Ile	Pro	Val	Val	Ile	Asp
			50				55				60				
Ala	Asp	Gly	Leu	Trp	Leu	Val	Ala	Gln	Gln	Pro	Ala	Leu	Ile	His	Gly
65						70				75				80	
Tyr	Arg	Lys	Ala	Val	Leu	Thr	Pro	Asn	His	Val	Glu	Phe	Ser	Arg	Leu
				85				90						95	
Tyr	Asp	Ala	Val	Leu	Arg	Gly	Pro	Met	Asp	Ser	Asp	Asp	Ser	His	Gly
			100					105						110	
Ser	Val	Leu	Arg	Leu	Ser	Gln	Ala	Leu	Gly	Asn	Val	Thr	Val	Val	Gln
			115				120					125			
Lys	Gly	Glu	Arg	Asp	Ile	Leu	Ser	Asn	Gly	Gln	Gln	Val	Leu	Val	Cys
			130				135					140			
Ser	Gln	Glu	Gly	Ser	Ser	Arg	Arg	Cys	Gly	Gly	Gln	Gly	Asp	Leu	Leu
145					150					155				160	
Ser	Gly	Ser	Leu	Gly	Val	Leu	Val	His	Trp	Ala	Leu	Leu	Ala	Gly	Pro

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 780  
 aagccggccc atacaccttt tctttggaac taaccaccca gatcttagaa gatgtacacg  
 840  
 tgcttctttc ctttttccta ctctacctgg ctagtcttta gatatgtttt tcttcgtatg  
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 948

<210> 4874

<211> 128

<212> PRT

<213> Homo sapiens

<400> 4874

Met	Met	Ser	Glu	His	Asp	Leu	Ala	Asp	Val	Val	Gln	Ile	Ala	Val	Glu
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Asp	Leu	Ser	Pro	Asp	His	Pro	Gly	Thr	Glu	Leu	Trp	Asp	Ser	Val	Val
			20					25					30		
Leu	Glu	Asn	His	Val	Val	Thr	Asp	Glu	Asp	Glu	Pro	Ala	Leu	Lys	Arg
		35					40					45			
Gln	Arg	Leu	Glu	Ile	Asn	Cys	Gln	Asp	Pro	Ser	Ile	Lys	Ser	Phe	Leu
	50					55					60				
Tyr	Ser	Ile	Asn	Gln	Thr	Ile	Cys	Leu	Arg	Leu	Asp	Ser	Ile	Glu	Ala
65				70					75					80	
Lys	Leu	Gln	Ala	Leu	Glu	Ala	Thr	Cys	Lys	Ser	Leu	Glu	Glu	Lys	Leu
			85						90				95		
Asp	Leu	Val	Thr	Asn	Lys	Gln	His	Ser	Pro	Ile	Gln	Val	Pro	Met	Val
			100						105				110		
Ala	Gly	Ser	Pro	Leu	Arg	Thr	Thr	Gln	Met	Cys	Asn	Lys	Val	Arg	Trp
		115					120						125		

<210> 4875

<211> 1255

<212> DNA

<213> Homo sapiens

<400> 4875

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 120  
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 180  
 aaaatacttt gcagctgggt agaaatatca tacctcctct gtcttcaca aagcacaag  
 240  
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 300  
 ttgcagcaat ctcagctctc aaagtgggag cagacttgct ccacgtgttc tgtgccagt  
 360  
 cggccgcacc tgtgattaag gcctacagcc cggagctgat cgtccacca gttcttgaca  
 420  
 gccccaatgc tgttcatgag gtggagaagt ggctgccccg gctgcatgct cttgtcgtag  
 480

tccgcttcac ctcccacca caggttcaag cctcctcagt atctgagaaa ggcgcgaagc  
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 1354

<210> 4872  
 <211> 90  
 <212> PRT  
 <213> Homo sapiens

<400> 4872  
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 Gln Pro Leu Arg Pro Cys Cys Cys Ser Ala Ala Trp Gln Ser Pro Ala  
 20 25 30  
 His Ala Pro Ser Glu Ser Gly Gly His Leu Pro Val Pro Ala Ser Pro  
 35 40 45  
 Val Pro Ala Pro Ala Ala Trp Ser Val Ser Thr Ala Ala Ala Ala  
 50 55 60  
 Pro Ala Ala Cys Arg Pro Ala Ala Gly Ala Gly Pro Cys Gln Gly His  
 65 70 75 80  
 Gln Gly Leu Pro Gly Ser Pro Leu Pro Glu  
 85 90

<210> 4873  
 <211> 948  
 <212> DNA  
 <213> Homo sapiens

<400> 4873  
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 ccactgtgag ttgaactott tcgtgttgac cggccactct ccgtgctctg gatgatgtcg  
 180  
 gaacacgacc tggccgatgt ggttcaaatt gcagtggag acctgagccc tgaccaccca  
 240  
 ggtacagagc tgtgggacag tgttgttttg gagaatcatg tagtgacaga tgaagacgaa  
 300  
 cctgctttga aacgccagcg actagaaatc aattgccagg atccatctat aaagtcattc  
 360  
 ctgtattcca tcaaccagac aatctgcttg cggttgata gcattgaagc caaattgcaa  
 420  
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 480  
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 aacaaagtgc gatggtgaaga acagaccagg gtgccggggc cttcaggtca cttggggaga  
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<210> 4871
<211> 1354
<212> DNA
<213> Homo sapiens
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4051

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                20           25           30
Gly Leu Lys Met Pro Ile Val Trp Trp Cys Ser Pro Cys Gln Gly Gln
                35           40           45
Glu Thr Glu Ala Ile Pro Ala Val Ser Arg Gln His Pro Leu Gly Leu
                50           55           60
Ser Leu Gly Trp Gly Tyr Pro Gly Met Gly Asp Phe Ser Tyr Gln Asn
65           70           75           80
Gly Asp Val Glu Lys Glu Ala Asp Val Pro Arg Leu Val Ala Ser Phe
                85           90           95
Cys Pro Ser His Pro Pro Thr Lys Asp Met Arg Leu Leu Pro Ser Asn
                100           105           110
Leu Leu Gly Ala Ser Pro Asp Arg Thr Pro Ser Gly Ile
                115           120           125

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<210> 4869  
 <211> 418  
 <212> DNA  
 <213> Homo sapiens

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<400> 4869
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120
caggactgca cggactgcct ggggaggggt ctttggcccc ccggttctcg caggggggct
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cggggaggcc ctgtgagcag ttggtcacag gtgggtccca ttcgatgcga tctgttctc
240
ccccaacagc cctggagaag ggggacgttg cctgctgtgg ctgcggctgt tttcctggcc
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tgtgagaggc ggggccagag tggccgttgg gaatctgggt gttgcaaggt gaccacaaac
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418

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<210> 4870  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

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<400> 4870
Met Ala Met Gly Ile Gly Trp Glu Leu Asn Gly Val Ala Thr Phe Gly
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Trp Thr Arg Arg Gln Pro Ser Phe Leu Gly Gln Asp Cys Thr Asp Cys
                20           25           30
Leu Gly Arg Gly Leu Trp Pro Pro Gly Ser Cys Arg Gly Ala Arg Gly
                35           40           45
Gly Pro Val Ser Ser Trp Ser Gln Val Gly Pro Ile Arg Cys Asp Pro
                50           55           60
Val Pro Pro Gln Gln Pro Trp Arg Arg Gly Thr Leu Pro Ala Val Ala
65           70           75           80
Ala Ala Val Phe Leu Ala Cys Glu Arg Arg Gly Gln Ser Gly Arg Trp

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<211> 148  
 <212> PRT  
 <213> Homo sapiens

<400> 4866  
 Thr Gly Glu Lys Pro Tyr Lys Cys Glu Val Cys Ser Lys Ala Phe Ser  
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 20 25 30  
 Pro Tyr Lys Cys Pro Arg Cys Gly Lys Ala Phe Ala Asp Ser Ser Tyr  
 35 40 45  
 Leu Leu Arg His Gln Arg Thr His Ser Gly Gln Lys Pro Tyr Lys Cys  
 50 55 60  
 Pro His Cys Gly Lys Ala Phe Gly Asp Ser Ser Tyr Leu Leu Arg His  
 65 70 75 80  
 Gln Arg Thr His Ser His Glu Arg Pro Tyr Ser Cys Thr Glu Cys Gly  
 85 90 95  
 Lys Cys Tyr Ser Gln Asn Ser Ser Leu Arg Ser His Gln Arg Val His  
 100 105 110  
 Thr Gly Gln Arg Pro Phe Ser Cys Gly Ile Cys Gly Lys Ser Phe Ser  
 115 120 125  
 Gln Arg Ser Ala Leu Ile Pro His Ala Arg Ser His Ala Arg Glu Lys  
 130 135 140  
 Pro Phe Thr Arg  
 145

<210> 4867  
 <211> 391  
 <212> DNA  
 <213> Homo sapiens

<400> 4867  
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 240  
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<210> 4868  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<400> 4868  
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 ggggcctgct ccccaacctg gagctgcctc attaccgagg acactggctt cgacctggga  
 300  
 gtcaccattg cccatgagat tgggcacagc ttcggcctgg agcacgacgg cgcgc  
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<210> 4864

<211> 118

<212> PRT

<213> Homo sapiens

<400> 4864

Leu Gly Ala His Phe Arg Val His Leu Val Lys Met Val Ile Leu Thr  
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 20 25 30  
 Leu Ser Val Cys Gly Trp Ser Gln Thr Ile Asn Pro Glu Asp Asp Thr  
 35 40 45  
 Asp Pro Gly His Ala Asp Leu Val Leu Tyr Ile Thr Arg Phe Asp Leu  
 50 55 60  
 Glu Leu Pro Asp Gly Asn Xaa Ala Val Arg Gly Val Thr Gln Leu Gly  
 65 70 75 80  
 Gly Ala Cys Ser Pro Thr Trp Ser Cys Leu Ile Thr Glu Asp Thr Gly  
 85 90 95  
 Phe Asp Leu Gly Val Thr Ile Ala His Glu Ile Gly His Ser Phe Gly  
 100 105 110  
 Leu Glu His Asp Gly Ala  
 115

<210> 4865

<211> 444

<212> DNA

<213> Homo sapiens

<400> 4865

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 120  
 aaggccttcg ccgacagctc ttacctgctt cgccaccagc gcactcactc tggccagaag  
 180  
 ccctacaagt gccacattg tggcaaggcc ttcggcgaca gctcctacct cctgcgacac  
 240  
 cagcgcaccc acagccacga gcggccctac agctgcaccg agtgcggaag gtgctatagc  
 300  
 cagaactcgt ccctgcgcag ccatcagagg gtgcacaccg gtcagaggcc cttcagctgt  
 360  
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 420  
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 444

<210> 4866

<210> 4862  
 <211> 260  
 <212> PRT  
 <213> Homo sapiens

<400> 4862  
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 Gly Tyr Leu Lys Leu Val Cys Val Ser Phe Gln Arg Gln Gly Phe His  
 20 25 30  
 Thr Val Gly Ser Arg Cys Lys Asn Arg Thr Gly Ala Glu His Leu Trp  
 35 40 45  
 Leu Thr Arg His Leu Arg Asp Pro Phe Val Lys Ala Ala Lys Val Glu  
 50 55 60  
 Ser Tyr Arg Cys Arg Ser Ala Phe Lys Leu Leu Glu Val Asn Glu Arg  
 65 70 75 80  
 His Gln Ile Leu Arg Pro Gly Leu Arg Val Leu Asp Cys Gly Ala Ala  
 85 90 95  
 Pro Gly Ala Trp Ser Gln Val Ala Val Gln Lys Val Asn Ala Ala Gly  
 100 105 110  
 Thr Asp Pro Ser Ser Pro Val Gly Phe Val Leu Gly Val Asp Leu Leu  
 115 120 125  
 His Ile Phe Pro Leu Glu Gly Ala Thr Phe Leu Cys Pro Ala Asp Val  
 130 135 140  
 Thr Asp Pro Arg Thr Ser Gln Arg Ile Leu Glu Val Leu Pro Gly Arg  
 145 150 155 160  
 Arg Ala Asp Val Ile Leu Ser Asp Met Ala Pro Asn Ala Thr Gly Phe  
 165 170 175  
 Arg Asp Leu Asp His Asp Arg Leu Ile Ser Leu Cys Leu Thr Leu Leu  
 180 185 190  
 Ser Val Thr Pro Asp Ile Leu Gln Pro Gly Gly Thr Phe Leu Cys Lys  
 195 200 205  
 Thr Trp Ala Gly Ser Gln Ser Arg Arg Leu Gln Arg Arg Leu Thr Glu  
 210 215 220  
 Glu Phe Gln Asn Val Arg Ile Ile Lys Pro Glu Ala Ser Arg Lys Glu  
 225 230 235 240  
 Ser Ser Glu Val Tyr Phe Leu Ala Thr Gln Tyr His Gly Arg Lys Gly  
 245 250 255  
 Thr Val Lys Gln  
 260

<210> 4863  
 <211> 355  
 <212> DNA  
 <213> Homo sapiens

<400> 4863  
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 120  
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ctgggtgtgtg tttcctttca gcgtcaaggg ttccacactg ttgggagtcg ctgcaagaat  
120  
cggacaggcg ctgagcacct gtggctgacc cgacatctca gggacccatt tgtgaaggct  
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gcgaaggtgg agagttaccg gtgtcgaagc gccttcaagc tcctggaggt gaacgagagg  
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420  
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&lt;210&gt; 4860

&lt;211&gt; 173

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4860

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Trp	Thr	Leu	Asp	Leu	Glu	Pro	Arg	Gly	Pro	Val	His	Ile	His	Pro	Thr
			20					25					30		
Arg	Val	Ser	Gly	Gly	Leu	Pro	Arg	Cys	Leu	Cys	Trp	Val	Ala	Val	Val
		35					40					45			
Val	Pro	Arg	Gly	Met	Glu	Cys	Pro	Gly	Leu	Leu	Gln	Glu	Leu	Ser	Thr
	50					55				60					
Gln	Gly	Gln	Gly	Glu	Pro	Arg	Glu	Lys	Arg	Pro	Gly	Leu	Leu	Ser	Phe
65				70					75					80	
Leu	Ile	Cys	Ser	Cys	Pro	Pro	Leu	Ser	Ser	Thr	Pro	Leu	Pro	Phe	Pro
			85					90					95		
Arg	Leu	Ser	Pro	Pro	Trp	Ala	Phe	Val	Cys	Phe	Gly	Arg	Cys	His	Leu
			100					105					110		
Thr	Arg	Thr	Leu	Ile	Phe	Asn	Pro	Ile	Pro	Leu	Pro	Pro	Thr	Leu	Pro
		115					120						125		
His	Phe	Asp	Leu	Ile	Leu	Trp	Leu	Trp	Ala	Glu	Ala	Ser	Gln	Gly	Ser
	130					135					140				
Trp	Val	Gly	Trp	Val	Leu	Arg	Pro	Pro	Gln	Thr	Ser	Thr	Glu	Thr	Cys
145				150				155						160	
Pro	Cys	Ala	Val	Cys	Thr	Leu	His	Ser	Leu	Pro	Cys	Leu			
			165					170							

&lt;210&gt; 4861

&lt;211&gt; 1622

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4861

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&lt;211&gt; 269

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4858

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Xaa Gly Arg Arg Gly Gln Met Glu Glu Tyr Glu Glu Glu Pro Ser Arg
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Gly Trp Trp Arg Leu Gly Ser Ser Ser Gln Ala Ala Cys Leu Lys Gln
 20           25           30
Ile Leu Leu Leu Gln Leu Asp Leu Ile Glu Gln Gln Gln Gln Leu
 35           40           45
Gln Ala Lys Glu Lys Glu Ile Glu Glu Leu Lys Ser Glu Arg Asp Thr
 50           55           60
Leu Leu Ala Arg Ile Glu Arg Met Glu Arg Arg Met Gln Leu Val Lys
 65           70           75           80
Lys Asp Asn Glu Lys Glu Arg His Lys Leu Phe Gln Gly Tyr Glu Thr
 85           90           95
Glu Glu Arg Glu Glu Thr Glu Leu Ser Glu Lys Ile Lys Leu Glu Cys
100           105           110
Gln Pro Glu Leu Ser Glu Thr Ser Gln Thr Leu Pro Pro Lys Pro Phe
115           120           125
Ser Cys Gly Arg Ser Gly Lys Gly His Lys Arg Lys Ser Pro Phe Gly
130           135           140
Ser Thr Glu Arg Lys Thr Pro Val Lys Lys Leu Ala Pro Glu Phe Ser
145           150           155           160
Lys Val Lys Thr Lys Thr Pro Lys His Ser Pro Ile Lys Glu Glu Pro
165           170           175
Cys Gly Ser Leu Ser Glu Thr Val Cys Lys Arg Glu Leu Arg Ser Gln
180           185           190
Glu Thr Pro Glu Lys Pro Arg Ser Ser Val Asp Thr Pro Pro Arg Leu
195           200           205
Ser Thr Pro Gln Lys Gly Pro Ser Thr His Pro Lys Glu Lys Ala Phe
210           215           220
Ser Ser Glu Ile Glu Asp Leu Pro Tyr Leu Ser Thr Thr Glu Met Tyr
225           230           235           240
Leu Cys Arg Trp His Gln Pro Pro Pro Ser Pro Leu Pro Leu Arg Glu
245           250           255
Ser Ser Pro Lys Lys Glu Glu Thr Val Ala Ser Lys Ala
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&lt;210&gt; 4859

&lt;211&gt; 689

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4859

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240

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2640  
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2760  
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2880  
tcagaat  
2887

&lt;210&gt; 4858

4042

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 420  
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 600  
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 660  
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<210> 4856

<211> 237

<212> PRT

<213> Homo sapiens

<400> 4856

Met	Ala	Phe	Asn	Phe	Gly	Ala	Pro	Ser	Gly	Thr	Ser	Gly	Thr	Ala	Ala	1	5	10	15
Ala	Thr	Ala	Ala	Pro	Ala	Gly	Gly	Phe	Gly	Gly	Phe	Gly	Thr	Thr	Ser	20	25	30	
Thr	Thr	Ala	Gly	Ser	Ala	Phe	Ser	Phe	Ser	Ala	Pro	Thr	Asn	Thr	Gly	35	40	45	
Thr	Thr	Gly	Leu	Phe	Gly	Gly	Thr	Gln	Asn	Lys	Gly	Phe	Gly	Phe	Gly	50	55	60	
Thr	Gly	Phe	Gly	Thr	Thr	Gly	Thr	Ser	Thr	Gly	Leu	Gly	Thr	Gly		65	70	75	80
Leu	Gly	Thr	Gly	Leu	Gly	Phe	Gly	Gly	Phe	Asn	Thr	Gln	Gln	Gln	Gln	85	90	95	
Gln	Gln	Thr	Thr	Leu	Gly	Gly	Leu	Phe	Ser	Gln	Pro	Thr	Gln	Ala	Pro	100	105	110	
Thr	Gln	Ser	Asn	Gln	Leu	Ile	Asn	Thr	Ala	Ser	Ala	Leu	Ser	Ala	Pro	115	120	125	
Thr	Leu	Leu	Gly	Asp	Glu	Arg	Asp	Ala	Ile	Leu	Ala	Lys	Trp	Asn	Gln	130	135	140	
Leu	Gln	Ala	Phe	Trp	Gly	Thr	Gly	Lys	Gly	Tyr	Phe	Asn	Asn	Asn	Ile	145	150	155	160
Pro	Pro	Val	Glu	Phe	Thr	Gln	Glu	Asn	Pro	Phe	Cys	Arg	Phe	Lys	Ala	165	170	175	
Val	Gly	Tyr	Ser	Cys	Met	Pro	Ser	Asn	Lys	Asp	Glu	Asp	Gly	Leu	Val	180	185	190	
Val	Leu	Val	Phe	Asn	Lys	Lys	Glu	Thr	Glu	Ile	Arg	Ser	Gln	Gln	Gln	195	200	205	
Gln	Leu	Val	Glu	Ser	Leu	His	Lys	Val	Leu	Gly	Gly	Asn	Gln	Thr	Leu	210	215	220	
Thr	Val	Asn	Val	Glu	Gly	Thr	Lys	Thr	Leu	Pro	Asp	Asp							

1 5 10 15  
 Gly Ser Gln Gly Leu Ser Ser Leu Ala Glu Glu Ala Ala Arg Ala Thr  
 20 25 30  
 Glu Asn Pro Glu Gln Val Ala Ser Glu Gly Leu Pro Glu Pro Val Leu  
 35 40 45  
 Arg Lys Val Glu Leu Pro Val Pro Thr His Arg Arg Pro Val Gln Ala  
 50 55 60  
 Trp Val Glu Ser Leu Arg Gly Phe Glu Gln Glu Arg Val Gly Leu Ala  
 65 70 75 80  
 Asp Leu His Pro Asp Val Phe Ala Thr Ala Pro Arg Leu Asp Ile Leu  
 85 90 95  
 His Gln Val Ala Met Trp Gln Lys Asn Phe Lys Arg Ile Ser Tyr Ala  
 100 105 110  
 Lys Thr Lys Thr Arg Ala Glu Val Arg Gly Gly Gly Arg Lys Pro Xaa  
 115 120 125  
 Ala Ala Glu Arg His Trp Ala Gly Pro Ala Trp Gln His Pro Leu Ser  
 130 135 140  
 Ala Leu Ala Arg Arg Arg Cys Cys Pro Trp Pro Pro Gly Pro Thr Ser  
 145 150 155 160  
 Tyr Tyr Tyr Met Leu Pro Met Lys Val Arg Ala Leu Gly Leu Lys Val  
 165 170 175  
 Ala Leu Thr Val Lys Leu Ala Gln Asp Asp Leu His Ile Met Asp Ser  
 180 185 190  
 Leu Glu Leu Pro Thr Gly Asp Pro Gln Tyr Leu Thr Glu Leu Ala His  
 195 200 205  
 Tyr Arg Arg Trp Gly Asp Ser Val Leu Leu Val Asp Leu Thr His Glu  
 210 215 220  
 Glu Met Pro Gln Ser Ile Val Glu Ala Thr Ser Arg Leu Lys Thr Phe  
 225 230 235 240  
 Asn Leu Ile Pro Ala Val Gly Leu Asn Val His Ser Met Leu Lys His  
 245 250 255  
 Gln Thr Leu Val Leu Thr Leu Pro Thr Val Ala Phe Leu Glu Asp Lys  
 260 265 270  
 Leu Leu Trp Gln Asp Ser Arg Tyr Arg Pro Leu Tyr Pro Phe Ser Leu  
 275 280 285  
 Pro Tyr Ser Asp Phe Pro Arg Pro Leu Pro His Ala Thr Gln Gly Pro  
 290 295 300  
 Ala Ala Thr Pro Tyr His Cys  
 305 310

&lt;210&gt; 4855

&lt;211&gt; 750

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4855

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60

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120

tttgggacaa catctacaac tgcaggttct gcattcagct tttctgcccc aactaacaca

180

ggcactactg gactcttttg tggtactcag aacaaagggt ttggatttgg tactgggttt

240

gttttgacaca ccccgctttc cagcgcggag tcgggcgggg gtagggcggc gtcgcgtgcg  
180  
tgacgtcatc cagcggcgcc atcggaggct ccagtggcct tgacctcccg cgtcgtgtag  
240  
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360  
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420  
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480  
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600  
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720  
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780  
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840  
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900  
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1140  
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1200  
cttctgagcc aggccgagcc cctggccgac ttgggagcct tagggccacg cccacccttc  
1260  
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1320  
ccatcgccat tgggaagggg cgactccacg gagagcccag acggggcttc tgcattccatt  
1380  
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1440  
aaaaaaaaaa aaaaaaaaaa aaaaaaa  
1467

&lt;210&gt; 4854

&lt;211&gt; 311

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4854

Met Leu Gln Phe Val Arg Ala Gly Ala Arg Ala Trp Leu Arg Pro Thr

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 600  
 gaattattgt ccatcagcag tgagtctctt caagccagaa aggaaaactc aatggacact  
 660  
 gcttcccaag ccatcaaata actgaactct gaatgatggc tggagattgt ctatcaagga  
 720  
 aggaagttac tgtcttccca ttcaagtact gtccattaag tgtcttgcct cagatttgat  
 780  
 ttaatcttaa ttaaaggat caggtggcaa tttagaattc  
 820

<210> 4852

<211> 207

<212> PRT

<213> Homo sapiens

<400> 4852

Met	Ser	Cys	Thr	Ile	Glu	Lys	Ile	Leu	Thr	Asp	Ala	Lys	Thr	Leu	Leu
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Glu	Arg	Leu	Arg	Glu	His	Asp	Ala	Ala	Glu	Ser	Leu	Val	Asp	Gln	
		20					25				30				
Ser	Ala	Ala	Leu	His	Arg	Arg	Val	Ala	Ala	Met	Arg	Glu	Ala	Gly	Thr
		35				40					45				
Ala	Leu	Pro	Asp	Gln	Tyr	Gln	Glu	Asp	Ala	Ser	Asp	Met	Lys	Asp	Met
	50				55					60					
Ser	Lys	Tyr	Lys	Pro	His	Ile	Leu	Leu	Ser	Gln	Glu	Asn	Thr	Gln	Ile
65				70					75					80	
Arg	Asp	Leu	Gln	Gln	Glu	Asn	Arg	Glu	Leu	Trp	Ile	Ser	Leu	Glu	Glu
			85				90							95	
His	Gln	Asp	Ala	Leu	Glu	Leu	Ile	Met	Ser	Lys	Tyr	Arg	Lys	Gln	Met
		100					105					110			
Leu	Gln	Leu	Met	Val	Ala	Lys	Lys	Ala	Val	Asp	Ala	Glu	Pro	Val	Leu
		115					120					125			
Lys	Ala	His	Gln	Ser	His	Ser	Ala	Glu	Ile	Glu	Ser	Gln	Ile	Asp	Arg
	130					135					140				
Ile	Cys	Glu	Met	Gly	Glu	Val	Met	Arg	Lys	Ala	Val	Gln	Val	Asp	Asp
145				150					155					160	
Asp	Gln	Phe	Cys	Lys	Ile	Gln	Glu	Lys	Leu	Ala	Gln	Leu	Glu	Leu	Glu
			165				170						175		
Asn	Lys	Glu	Leu	Arg	Glu	Leu	Leu	Ser	Ile	Ser	Ser	Glu	Ser	Leu	Gln
		180					185					190			
Ala	Arg	Lys	Glu	Asn	Ser	Met	Asp	Thr	Ala	Ser	Gln	Ala	Ile	Lys	
		195					200					205			

<210> 4853

<211> 1467

<212> DNA

<213> Homo sapiens

<400> 4853

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 120

ctgaagaaac acacggagga catcagcagc gtctacgaga tccgcgagag gctcggctcg  
 120  
 ggtgccttct cagaggtggt gctggccag gagcggggct ccgcacacct cgtggccctc  
 180  
 aagtgcattcc ccaagaaggc cctccggggc aaggaggccc tggaggagaa cgagatcgca  
 240  
 gtgctccgta ggatcagtca cccaacatc gtcgctctgg aggatgtcca cgagagccct  
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 tcccacctct acctggccat g  
 321

<210> 4850

<211> 90

<212> PRT

<213> Homo sapiens

<400> 4850

Met	Leu	Leu	Leu	Lys	Lys	His	Thr	Glu	Asp	Ile	Ser	Ser	Val	Tyr	Glu
1				5				10					15		
Ile	Arg	Glu	Arg	Leu	Gly	Ser	Gly	Ala	Phe	Ser	Glu	Val	Val	Leu	Ala
				20				25					30		
Gln	Glu	Arg	Gly	Ser	Ala	His	Leu	Val	Ala	Leu	Lys	Cys	Ile	Pro	Lys
				35			40					45			
Lys	Ala	Leu	Arg	Gly	Lys	Glu	Ala	Leu	Val	Glu	Asn	Glu	Ile	Ala	Val
				50			55				60				
Leu	Arg	Arg	Ile	Ser	His	Pro	Asn	Ile	Val	Ala	Leu	Glu	Asp	Val	His
65					70				75					80	
Glu	Ser	Pro	Ser	His	Leu	Tyr	Leu	Ala	Met						
				85					90						

<210> 4851

<211> 820

<212> DNA

<213> Homo sapiens

<400> 4851

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 120  
 cagcatgcgg ccgccgagtc gctggtggat cagtcggcgg cgctgcaccg gcgggtagca  
 180  
 gctatgcggg aggcggggac agcgcttccg gaccagtatc aagaggatgc atccgatatg  
 240  
 aaggacatgt ccaaatacaa acctcacatt ctgctgtccc aagagaacac acagattaga  
 300  
 gacttgcaac aggaaaacag agagctatgg atttccttgg aggaacacca ggatgctttg  
 360  
 gaacttatca tgagcaaata tcggaaacag atgttacagt taatggttgc taaaaaagcg  
 420  
 gtggatgctg aaccagtcct gaaagctcac cagtctcact ctgcagaaat tgagagtcag  
 480  
 attgacagaa tctgtgaaat gggagaagtg atgaggaaag cagttcaggt ggatgatgac  
 540

gagaatgaac tcagccctag tctgacagtc ctagatttct gtgaaataag agtattcttc  
 2700  
 aacttagtgc tcacactcac ataccatgag ggttctctgc aggggttttag gggtttctctg  
 2760  
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 2804

<210> 4848

<211> 242

<212> PRT

<213> Homo sapiens

<400> 4848

Met	Arg	Leu	Arg	Arg	Phe	Gln	Ser	Val	Glu	Ser	Gly	Ala	Asn	Asn	Val
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Val	Phe	Ile	Arg	Thr	Leu	Gly	Ile	Glu	Pro	Glu	Lys	Leu	Val	His	His
			20					25					30		
Ile	Leu	Gln	Asp	Met	Tyr	Lys	Thr	Lys	Lys	Lys	Lys	Thr	Arg	Val	Ile
		35					40						45		
Leu	Arg	Met	Leu	Pro	Ile	Ser	Gly	Thr	Cys	Lys	Ala	Phe	Leu	Glu	Asp
	50					55					60				
Met	Lys	Lys	Tyr	Ala	Glu	Thr	Phe	Leu	Glu	Pro	Trp	Phe	Lys	Ala	Pro
65					70				75						80
Asn	Lys	Gly	Thr	Phe	Gln	Ile	Val	Tyr	Lys	Ser	Arg	Asn	Asn	Ser	His
				85					90					95	
Val	Asn	Arg	Glu	Glu	Val	Ile	Arg	Glu	Leu	Ala	Gly	Ile	Val	Cys	Thr
			100					105					110		
Leu	Asn	Ser	Glu	Asn	Lys	Val	Asp	Leu	Thr	Asn	Pro	Gln	Tyr	Thr	Val
		115					120					125			
Val	Val	Glu	Ile	Ile	Lys	Ala	Val	Cys	Cys	Leu	Ser	Val	Val	Lys	Asp
	130					135					140				
Tyr	Met	Leu	Phe	Arg	Lys	Tyr	Asn	Leu	Gln	Glu	Val	Val	Lys	Ser	Pro
145					150				155						160
Lys	Asp	Pro	Ser	Gln	Leu	Asn	Ser	Lys	Gln	Gly	Asn	Gly	Lys	Glu	Ala
				165					170					175	
Lys	Leu	Glu	Ser	Ala	Asp	Lys	Ser	Asp	Gln	Asn	Asn	Thr	Ala	Glu	Gly
			180					185					190		
Lys	Asn	Asn	Gln	Gln	Val	Pro	Glu	Asn	Thr	Glu	Glu	Leu	Gly	Gln	Thr
		195					200					205			
Lys	Pro	Thr	Ser	Asn	Pro	Gln	Val	Val	Asn	Glu	Gly	Gly	Ala	Lys	Pro
	210					215					220				
Glu	Leu	Ala	Ser	Gln	Ala	Thr	Glu	Gly	Ser	Lys	Ser	Asn	Glu	Asn	Asp
225					230				235					240	
Phe	Ser														

<210> 4849

<211> 321

<212> DNA

<213> Homo sapiens

<400> 4849

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 60

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1080  
caagccacag aaggatccaa gtcaaatgaa aatgacttct cataggaagt catttggtgt  
1140  
tgagctgac agtccagtgt cgcaattttg gaaggcaaga tgtgagagag acgagaacca  
1200  
ttttaggcat agaactacag acattttctga aaaggttggt gatgaagaac ttcagtcttc  
1260  
tgagtatact tcagtatact agtgcaacaa gggacacaaa gaaattctgt cttataaag  
1320  
aaagctactt ctcaagggta ttatgtggac tcagccaag ctctcctgtc ccattgtgca  
1380  
ttgtctgtga catgcaactt acaaaactag caattgtaac aataaatcac agccacttga  
1440  
caagaaagga tattcattat tttcaaatgg cttttggact atcaaaaaca gtaaggcttt  
1500  
tgttcagaaa tcacctttag tcaaaagggt taagaagcaa attatttagt agcagaactt  
1560  
atctcaggaa aggaaaatat gcatggttgg tgagaatcta ataacattaa aatgctggg  
1620  
caagatgcag taaaaagttg aagagacttt attctcaata agttgattta ctgatgat  
1680  
gtcatatgat gcaaaaaagg ttttgtgtca ttaactgaaa agtagcagct tctctatcca  
1740  
ggatgatgag tcaacagggt tcactaatat ttgtcatgct gtagcatttg taagatttgt  
1800  
aatgatgaa attcaaagaa aactttttct attgctagga gcctgccaga acaaaggcca  
1860  
atatataatg ttgtgacatc atatctgata accagagggtc tggatatctac actcctgggtg  
1920  
ccccatcagt ggttgtctcc ataagtcatt ttgcgttatt aaaaaaaaaa aaagaaatcc  
1980  
tgatgttgac attatagcac actgctttct ccacagagat gctgatatca aaaacttgaa  
2040  
gatacagtga agttctgaat aatgttaca aactggttac ctgtatcaaa gacccattta  
2100  
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2160  
cctcctgcc catacaaaca tccaggggtc tctcaaagga agcgttctct acaggatatt  
2220  
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2280  
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2340  
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2400  
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2460  
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2520  
ggaggaacca caagacccaa tgaaatagca ttttctctcc ttttcccagc actagtatat  
2580  
aacctatgag gaacccttgt ctctgaatct gctcagcttg aaattttgtc tctgaaggaa  
2640

530                      535                      540  
 Gly Arg Lys Ala Asp Val Trp Ser Leu Gly Cys Thr Val Val Glu Met  
 545                      550                      555                      560  
 Leu Thr Glu Lys Pro Pro Trp Ala Glu Tyr Glu Ala Met Ala Ala Ile  
                     565                      570                      575  
 Phe Lys Ile Ala Thr Gln Pro Thr Asn Pro Gln Leu Pro Ser His Ile  
                     580                      585                      590  
 Ser Glu His Gly Arg Asp Phe Leu Arg Arg Ile Phe Val Glu Ala Arg  
                     595                      600                      605  
 Gln Arg Pro Ser Ala Glu Glu Leu Leu Thr His His Phe Ala Gln Leu  
                     610                      615                      620  
 Met Tyr  
 625

&lt;210&gt; 4847

&lt;211&gt; 2804

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4847

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 60  
 tgcccagcag actactcagc ctggcggcgg gaagcgcaaa ggcaaggctc agtatgtgct  
 120  
 ggccaagcgc gctcggcgct gcgacgctgg cgggccccgt cagctagagc ccgggctaca  
 180  
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 240  
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 300  
 gacaaggatc agcagccctc tggaagtgag ggagaggatg atgatgcgga ggctgccttg  
 360  
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 420  
 gtggaaagtg gagcaaataa cggtgtcttc atcaggacac ttgggataga gcctgagaaa  
 480  
 ttggtgcac atattctcca ggatatgtac aaaaccaaga aaaagaagac tcgagttatt  
 540  
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 600  
 gcagaaacat ttttggaacc ctggttttaa gctccaaaca aaggacatt tcagattgtg  
 660  
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 720  
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 840  
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3286

&lt;210&gt; 4846

&lt;211&gt; 626

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4846

Met	Asp	Glu	Gln	Glu	Ala	Leu	Asn	Ser	Ile	Met	Asn	Asp	Leu	Val	Ala
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Leu	Gln	Met	Asn	Arg	Arg	His	Arg	Met	Pro	Gly	Tyr	Glu	Thr	Met	Lys
			20					25					30		
Asn	Lys	Asp	Thr	Gly	His	Ser	Asn	Arg	Gln	Ser	Asp	Val	Arg	Ile	Lys
		35					40					45			
Phe	Glu	His	Asn	Gly	Glu	Arg	Arg	Ile	Ile	Ala	Phe	Ser	Arg	Pro	Val
	50					55					60				
Lys	Tyr	Glu	Asp	Val	Glu	His	Lys	Val	Thr	Thr	Val	Phe	Gly	Gln	Pro
65					70				75					80	
Leu	Asp	Leu	His	Tyr	Met	Asn	Asn	Glu	Leu	Ser	Ile	Leu	Leu	Lys	Asn
			85					90						95	
Gln	Asp	Asp	Leu	Asp	Lys	Ala	Ile	Asp	Ile	Leu	Asp	Arg	Ser	Ser	Ser

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2280

1475                      1480                      1485  
 Lys Ser Cys Ser Arg Thr Cys Gly Gln Cys Lys Gly Ser Leu Glu Arg  
 1490                      1495                      1500  
 Lys Ser Trp Thr Ser Ser Ser Ser Leu Ser Asp Thr Tyr Glu Pro Asn  
 1505                      1510                      1515                      1520  
 Tyr Gly Thr Val Lys Arg Arg Val Leu Glu Ser Thr Pro Ala Glu Ser  
 1525                      1530                      1535  
 Ser Glu Gly Leu Asp Pro Lys Asp Ala Thr Asp Pro Val Tyr Lys Thr  
 1540                      1545                      1550  
 Val Thr Ser Ser Thr Glu Lys Gly Leu Ile Val Tyr Cys Val Thr Ser  
 1555                      1560                      1565  
 Pro Lys Lys Asp Asp Arg Tyr Arg Glu Pro Pro Pro Thr Pro Pro Gly  
 1570                      1575                      1580  
 Tyr Leu Gly Ile Ser Leu Ala Asp Leu Lys Glu Gly Pro His Thr His  
 1585                      1590                      1595                      1600  
 Leu Lys Pro Pro Asp Tyr Ser Val Ala Val Gln Arg Ser Lys Met Met  
 1605                      1610                      1615  
 His Asn Ser Leu Ser Arg Leu Pro Pro Ala Ser Leu Ser Ser Asn Leu  
 1620                      1625                      1630  
 Glu Ala Cys Val Pro Ser Lys Ile Val Thr Gln Pro Gln Arg His Asn  
 1635                      1640                      1645  
 Leu Gln Pro Phe His Pro Lys Leu Gly Asp Val Thr Asp Ala Asp Ser  
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 Glu Ala Asp Glu Asn Glu Gln Val Ser Ala Val  
 1665                      1670                      1675

&lt;210&gt; 4845

&lt;211&gt; 3286

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4845

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1045 1050 1055  
 Gln Asp Ile Phe Asp Pro Ser Arg Asn Met Ala Lys Tyr Arg Asn Ile  
 1060 1065 1070  
 Leu Ser Ser Gln Ser Met Gln Pro Pro Ile Ile Pro Leu Phe Pro Val  
 1075 1080 1085  
 Val Lys Lys Asp Met Thr Phe Leu His Glu Gly Asn Asp Ser Lys Val  
 1090 1095 1100  
 Asp Gly Leu Val Asn Phe Glu Lys Leu Arg Met Ile Ser Lys Glu Ile  
 1105 1110 1115 1120  
 Arg Gln Val Val Arg Met Thr Ser Ala Asn Met Asp Pro Ala Met Met  
 1125 1130 1135  
 Phe Arg Gln Arg Ser Leu Ser Gln Gly Ser Thr Asn Ser Asn Met Leu  
 1140 1145 1150  
 Asp Val Gln Gly Gly Ala His Lys Lys Arg Ala Arg Arg Ser Ser Leu  
 1155 1160 1165  
 Leu Asn Ala Lys Lys Leu Tyr Glu Asp Ala Gln Met Ala Arg Lys Val  
 1170 1175 1180  
 Lys Gln Tyr Leu Ser Ser Leu Asp Val Glu Thr Asp Glu Glu Lys Phe  
 1185 1190 1195 1200  
 Gln Met Met Ser Leu Gln Trp Glu Pro Ala Tyr Gly Thr Leu Thr Lys  
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 Asn Leu Ser Glu Lys Arg Ser Ala Lys Xaa Ser Ser Glu Met Ser Pro  
 1220 1225 1230  
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 Pro His Arg Val Ser Gln Val Leu Gln Val Pro Ala Val Asn Leu His  
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 Pro Ile Arg Lys Lys Gly Gln Thr Lys Asp Pro Ala Leu Asn Thr Ser  
 1265 1270 1275 1280  
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 His Thr Glu Asp Thr Ile Ser Val Ala Ser Ser Leu His Ser Ser Pro  
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 1380 1385 1390  
 His Ser Gln His Gly Pro Gly Trp Thr Leu Leu Lys Pro Ser Leu Ile  
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 Glu His Ile Ile Ile Glu Ala Ala Asp Ser Gly Arg Gly Ser Trp Thr  
 1425 1430 1435 1440  
 Ser Cys Ser Ser Ser Ser His Asp Asn Phe Gln Ser Leu Pro Asn Pro  
 1445 1450 1455  
 Lys Ser Trp Asp Phe Leu Asn Ser Tyr Arg His Thr His Leu Asp Asp  
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 Pro Ile Ala Glu Val Glu Pro Thr Asp Ser Glu Pro Tyr Ser Cys Ser

610	615	620
Lys Gly Phe Gly Ile Phe Val Glu Gly Val Glu Pro Gly Ser Lys Ala		
625	630	635
Ala Asp Ser Gly Leu Lys Arg Gly Asp Gln Ile Met Glu Val Asn Gly		640
	645	650
Gln Asn Phe Glu Asn Ile Thr Phe Met Lys Ala Val Glu Ile Leu Arg		655
	660	665
Asn Asn Thr His Leu Ala Leu Thr Val Lys Thr Asn Ile Phe Val Phe		670
	675	680
Lys Glu Leu Leu Phe Arg Thr Glu Gln Glu Lys Ser Gly Val Pro His		685
	690	700
Ile Pro Lys Ile Ala Glu Lys Lys Ser Asn Arg His Ser Ile Gln His		710
705	710	715
Val Pro Gly Asp Ile Glu Gln Thr Ser Gln Glu Lys Gly Ser Lys Lys		720
	725	730
Val Lys Ala Asn Thr Val Ser Gly Gly Arg Asn Lys Ile Arg Lys Ile		735
	740	745
Leu Asp Lys Thr Arg Phe Ser Ile Leu Pro Pro Lys Leu Phe Ser Asp		750
	755	760
Gly Gly Leu Ser Gln Ser Gln Asp Asp Ser Ile Val Gly Thr Arg His		765
	770	775
Cys Arg His Ser Leu Ala Ile Met Pro Ile Pro Gly Thr Leu Ser Ser		780
785	790	795
Ser Ser Pro Asp Leu Leu Gln Pro Thr Thr Ser Met Leu Asp Phe Ser		800
	805	810
Asn Pro Ser Asp Ile Pro Asp Gln Val Ile Arg Val Phe Lys Val Asp		815
	820	825
Gln Gln Ser Cys Tyr Ile Ile Ile Ser Lys Asp Thr Thr Ala Lys Glu		830
	835	840
Val Val Phe His Ala Val His Glu Phe Gly Leu Thr Gly Ala Ser Asp		845
	850	855
Thr Tyr Ser Leu Cys Glu Val Ser Val Thr Pro Glu Gly Val Ile Lys		860
865	870	875
Gln Arg Arg Leu Pro Asp Gln Phe Ser Lys Leu Ala Asp Arg Ile Gln		880
	885	890
Leu Asn Gly Arg Tyr Tyr Leu Lys Asn Asn Met Glu Thr Glu Thr Leu		895
	900	905
Cys Ser Asp Glu Asp Ala Gln Glu Leu Val Lys Glu Ser Gln Leu Ser		910
	915	920
Met Leu Gln Leu Ser Thr Ile Glu Val Ala Thr Gln Leu Ser Met Arg		925
	930	935
Asp Phe Asp Leu Phe Arg Asn Ile Glu Pro Thr Glu Tyr Ile Asp Asp		940
945	950	955
Leu Phe Lys Leu Asn Ser Lys Thr Gly Asn Thr His Leu Lys Arg Phe		960
	965	970
Glu Asp Ile Val Asn Gln Glu Thr Phe Trp Val Ala Ser Glu Ile Leu		975
	980	985
Thr Glu Ala Asn Gln Leu Lys Arg Met Lys Ile Ile Lys His Phe Ile		990
	995	1000
Lys Ile Ala Leu His Cys Arg Glu Cys Lys Asn Phe Asn Ser Met Phe		1005
	1010	1015
Ala Ile Ile Ser Gly Leu Asn Leu Ala Ser Val Ala Arg Leu Arg Gly		1020
1025	1030	1035
Thr Trp Glu Lys Leu Pro Ser Lys Tyr Glu Lys His Leu Gln Asp Leu		1040

4027

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 6403

&lt;210&gt; 4844

&lt;211&gt; 1675

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4844

Gly	Thr	Ser	Cys	Arg	Ser	Arg	Gly	Leu	Ala	Ser	Ala	Gln	Arg	Ser	Asp
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Pro	Cys	Leu	Ala	Val	Ala	Ser	Met	Ala	Pro	Thr	Leu	Phe	Gln	Lys	Leu
		20						25					30		
Phe	Ser	Lys	Arg	Thr	Gly	Leu	Gly	Ala	Pro	Gly	Arg	Asp	Ala	Arg	Asp
		35				40						45			
Pro	Asp	Cys	Gly	Phe	Ser	Trp	Pro	Leu	Pro	Glu	Phe	Asp	Pro	Ser	Gln
	50					55				60					
Ile	Arg	Leu	Ile	Val	Tyr	Gln	Asp	Cys	Glu	Arg	Arg	Gly	Arg	Asn	Val
65				70						75				80	
Leu	Phe	Asp	Ser	Ser	Val	Lys	Arg	Arg	Asn	Glu	Asp	Ile	Ser	Val	Ser
			85						90					95	
Asp	Leu	Asn	Thr	Ile	Tyr	Ser	Tyr	Leu	His	Gly	Met	Glu	Ile	Leu	Ser
			100					105					110		
Asn	Leu	Arg	Glu	His	Gln	Leu	Arg	Leu	Met	Ser	Ala	Arg	Ala	Arg	Tyr
		115					120					125			
Glu	Arg	Tyr	Ser	Gly	Asn	Gln	Val	Leu	Phe	Cys	Ser	Glu	Thr	Ile	Ala
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Arg	Cys	Trp	Tyr	Ile	Leu	Ser	Gly	Ser	Val	Leu	Val	Lys	Gly	Ser	
145				150					155					160	
Met	Val	Leu	Pro	Pro	Cys	Ser	Phe	Gly	Lys	Gln	Phe	Gly	Gly	Lys	Arg
			165					170						175	
Gly	Cys	Asp	Cys	Leu	Val	Leu	Glu	Pro	Ser	Glu	Met	Ile	Val	Val	Glu

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1980  
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2340  
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2460

&lt;213&gt; Homo sapiens

&lt;400&gt; 4842

```

Met Trp Lys Tyr Leu Asp Val His Ser Met His Gln Leu Glu Lys Thr
 1           5           10           15
Thr Asn Ala Glu Met Arg Glu Val Leu Ala Glu Leu Leu Glu Leu Gly
      20           25           30
Cys Pro Glu Gln Ser Leu Arg Asp Ala Ile Thr Leu Asp Leu Phe Cys
      35           40           45
His Ala Leu Ile Phe Cys Arg Gln Gln Gly Phe Ser Leu Glu Gln Thr
      50           55           60
Ser Ala Ala Cys Ala Leu Leu Gln Asp Leu His Lys Ala Cys Ile Gly
      65           70           75           80
His Ile His Val Leu Arg Ala Tyr Ile Lys Thr Gln Val Asn Lys Glu
      85           90           95
Leu Glu Gln Leu Gln Gly Leu Val Glu Glu Arg Ser Arg Pro Ala Arg
      100           105           110
Lys Gly Ser Ala Ala Ser
      115

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&lt;210&gt; 4843

&lt;211&gt; 6403

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4843

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120
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180
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240
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360
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420
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840

```

gctgttcatt ccactaatat ttatctagta cctattctgt gccagcatt gtctctacct  
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 cagtttgcca caaatatgaa aaaaaaaaaa ttcttggaac tgtgaggctt caatgtgttg  
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 1313

<210> 4840  
 <211> 66  
 <212> PRT  
 <213> Homo sapiens

<400> 4840  
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 Gly Thr Pro Ala Arg Gln Lys Leu Glu Lys Ala Arg Asp Val Ala Arg  
 20 25 30  
 Asp Pro Gly Thr Ser Pro Ser Ser Pro Gly Pro Pro Gly Pro Asp  
 35 40 45  
 Gly His Ser Arg Tyr Ser Ala His Ser Val Leu Gly His Pro Ala Pro  
 50 55 60  
 Ala Val  
 65

<210> 4841  
 <211> 558  
 <212> DNA  
 <213> Homo sapiens

<400> 4841  
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 120  
 ctggacgtcc attccatgca ccagctggag aagaccacca atgctgagat gagggagggtg  
 180  
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 240  
 gacctcttct gccacgcgt cattttctgc cgccagcagg gcttctcact ggagcagacg  
 300  
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 420  
 gaggagcgt caaggccagc gaggaaggc tcagcagcaa gttgactgca ctagagcggc  
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<210> 4842  
 <211> 118  
 <212> PRT

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Arg	Asn	Met	Asp	Lys	Gln	Arg	Gln	Lys	Arg	Leu	Gln	Glu	Gln	Lys	Gln
			245			250					255				
Gln	Glu	Gly	Tyr	Asp	Gly	Gly	Pro	Asn	Leu	Arg	Thr	Lys	Val	Trp	Gln
		260				265					270				
Arg	Gly	Thr	Pro	Ser	Pro	Ser	Pro	Tyr	Val	Ser	Pro	Arg	His	Ser	Pro
		275				280					285				
Trp	Ser	Ser	Pro	Lys	Leu	Pro	Tyr	Gly	Glu	Thr	Thr	Thr	Arg		
		290				295					300				

&lt;210&gt; 4839

&lt;211&gt; 1313

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4839

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120
tccccggggc cggccggccc tgatggccac tcacgtata gcgccactc tgtcctgggc
180
catcccgcg cagcagtgtg gccccagcc cgggcgcctg aatgctctcc ctccggtcg
240
ctgctcgggt cccactttg gcgaccgntg ccccgagtc ctgcttcccc ggggcctgct
300
ctgtatcagg cgctgcgcc ttcaagggtg cccggcccgc ctgccctccc caagagccga
360
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420
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600
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720
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780
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840
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900
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960
catttggggg tcaaagttga gaccagattg ctccagtttg tataaaatta gcatttctta
1020
tcacaccaag gccacacctg ttctctggcc tcacaaacca gtgaggatgt aaaggtttgt
1080
tgagggtggg gaacagaagt gaaatgagca atctgctcca tttagaagtc agtcgcttcg
1140

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acgcatgccg acgacagtgc agccatggcc attgcagaga tgctcaaagt caatgagcac  
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 720  
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 780  
 gatggaggac ccaatcttag gaccaaagtc tggcaaagag gaacacctag cccttcccct  
 840  
 tatgtatctc ccaggcactc accgtggtca tccccaaaac tcccctacgg agagacgaca  
 900  
 acgcgt  
 906

&lt;210&gt; 4838

&lt;211&gt; 302

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4838

Xaa Gly Glu Glu Glu Val Val Ala Ala Phe Gly Lys Lys Glu Ser  
 1 5 10 15  
 Gln Glu Glu Glu Glu Glu Asp Ser Asp Glu Gly Glu Arg Thr Ile  
 20 25 30  
 Glu Thr Ala Lys Gly Ile Asn Gly Thr Val Asn Tyr Asp Ser Val Asn  
 35 40 45  
 Ser Asp Asn Ser Lys Pro Lys Ile Phe Lys Ser Gln Ile Glu Asn Ile  
 50 55 60  
 Asn Leu Thr Asn Gly Ser Asn Gly Arg Asn Thr Glu Ser Pro Ala Ala  
 65 70 75 80  
 Ile His Pro Cys Gly Asn Pro Thr Val Ile Glu Asp Ala Leu Asp Lys  
 85 90 95  
 Ile Lys Ser Asn Asp Pro Asp Thr Thr Glu Val Asn Leu Asn Asn Ile  
 100 105 110  
 Glu Asn Ile Thr Thr Gln Thr Leu Thr Arg Phe Ala Glu Ala Leu Lys  
 115 120 125  
 Asp Asn Thr Val Val Lys Thr Phe Ser Leu Ala Asn Thr His Ala Asp  
 130 135 140  
 Asp Ser Ala Ala Met Ala Ile Ala Glu Met Leu Lys Val Asn Glu His  
 145 150 155 160  
 Ile Thr Asn Val Asn Val Glu Ser Asn Phe Ile Thr Gly Lys Gly Ile  
 165 170 175  
 Leu Ala Ile Met Arg Ala Leu Gln His Asn Thr Val Leu Thr Glu Leu  
 180 185 190  
 Arg Phe His Asn Gln Arg His Ile Met Gly Ser Gln Val Glu Met Glu  
 195 200 205  
 Ile Val Lys Leu Leu Lys Glu Asn Thr Thr Leu Leu Arg Leu Gly Tyr  
 210 215 220  
 His Phe Glu Leu Pro Gly Pro Arg Met Ser Met Thr Ser Ile Leu Thr

```

<400> 4837
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120
actgtaaatt atgatagtgt caattctgac aactctaagc caaagatatt taaaagtcaa
180
atagagaaca taaatttgac caatggcagc aatgggagga acacagagtc ccagctgccc
240
attcaccctt gtggaaatcc tacagtgatt gaggacgctt tggacaagat taaaagcaat
300
gaccctgaca ccacagaagt caatttgaac aacattgaga acatcacaac acagaccctt
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420

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cgtttccccg gtgcccgggt gccatggctc agtgtgcaga cagccgcacc ctcaccactg  
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 cgctcatgg atctactctc caagaagcac ccgctggaca cactgttcct gctggccggg  
 900  
 ccagacacgg tgctcacgcc tgacttctcg aaccgctgcc gcctgcatgc catctccggc  
 960  
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 1020  
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 1080  
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 gaacaagaag aggagctgct ggagagcctg gatgtgtacg agctgttcct ccacttctcc  
 1200  
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 1846

&lt;210&gt; 4836

&lt;211&gt; 349

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4836

Xaa	His	Phe	Arg	Ser	Ala	Leu	Thr	Ala	His	Pro	Val	Arg	Asp	Pro	Val
1				5					10					15	
His	Met	Tyr	Gln	Leu	His	Lys	Ala	Phe	Ala	Arg	Ala	Glu	Leu	Glu	Arg
			20					25					30		
Thr	Tyr	Gln	Glu	Ile	Gln	Glu	Leu	Gln	Trp	Glu	Ile	Gln	Asn	Thr	Ser
		35					40					45			
His	Leu	Ala	Val	Asp	Gly	Asp	Arg	Ala	Ala	Ala	Trp	Pro	Val	Gly	Ile
	50					55					60				
Pro	Ala	Pro	Ser	Arg	Pro	Ala	Ser	Arg	Phe	Glu	Val	Leu	Arg	Trp	Asp
65					70					75				80	
Tyr	Phe	Thr	Glu	Gln	His	Ala	Phe	Ser	Cys	Ala	Asp	Gly	Ser	Pro	Arg

&lt;400&gt; 4834

Met Thr His Gln Asp Leu Ser Ile Thr Ala Lys Leu Ile Asn Gly Gly  
 1 5 10 15  
 Val Ala Gly Leu Val Gly Val Thr Cys Val Phe Pro Ile Asp Leu Ala  
 20 25 30  
 Lys Thr Arg Leu Gln Asn Gln His Gly Lys Ala Met Tyr Lys Gly Met  
 35 40 45  
 Ile Asp Cys Leu Met Lys Thr Ala Arg Ala Glu Gly Phe Phe Gly Met  
 50 55 60  
 Tyr Arg Gly Ala Ala Val Asn Leu Thr Leu Val Thr Pro Glu Lys Ala  
 65 70 75 80  
 Ile Lys Leu Ala Ala Asn Asp Phe Phe Arg Arg Leu Leu Met Glu Asp  
 85 90 95  
 Gly Met Gln Arg Asn Leu Lys Met Glu Met Leu Ala Gly Cys Gly Ala  
 100 105 110  
 Gly Met Cys Gln Val Val Val Thr Cys Pro Met Glu Met Leu Lys Ile  
 115 120 125  
 Gln Leu Gln Ala Cys Trp Thr Pro Gly Arg Pro Ser Ser Gly Leu Gly  
 130 135 140  
 Leu Ser Thr  
 145

&lt;210&gt; 4835

&lt;211&gt; 1846

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4835

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 120  
 cagtgggaga tccagaatac cagccatctg gccgttgatg gggaccgggc agctgcttgg  
 180  
 cccgtgggta ttccagcacc atcccgcctg gccctccgct ttgaggtgct gcgctgggac  
 240  
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 660  
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 720  
 cgcgtggccc atgcagatgt cttcgcacct gtcaaggccc acgtggcaga gctggagcgg  
 780

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      20      25      30
Pro His Phe Asn Lys His Leu Leu Gly Ala Glu His Gly Asp Glu Pro
      35      40      45
Arg His Gly Gly Leu Thr Leu Arg Leu Gly Leu His Gln Gln Ser Val
      50      55      60
Leu Gly Gly Gln Asp Gln Leu Arg Val Arg Val Thr Glu Leu Glu Asp
65      70      75      80
Glu Val Arg Asn Leu Arg Lys Ile Asn Arg Asp Leu Phe Asp Phe Ser
      85      90      95
Thr Arg Phe Ile Thr Arg Pro Ala Lys
      100      105

```

&lt;210&gt; 4833

&lt;211&gt; 872

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4833

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120
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180
gaactatata ctgggttcca gaaaaggcag aggttcttac cgaaagcagg ggaggaagcc
240
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360
gacagcccca acagcggcta cccaaggag ccagcagcct tgtgtcctgg gatccccagc
420
ccctgcagaa tgaccaccca ggatctgagc atcacagcca aactcatcaa tggagggtga
480
gcagggtctg tgggggtgac ctgctgttc cccatcgact tggccaagac tcgcctgcag
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aaccagcatg ggaaagccat gtacaaagga atgatcgact gcctgatgaa gacgggtcgg
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780
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840
cgtccatcat cagggtcgg cctcagcacc ct
872

```

&lt;210&gt; 4834

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

```

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Val Leu Asp Ile Tyr Gly Phe Glu Ile Phe Glu Asp Asn Ser Phe Glu
385              390              395              400
Gln Phe Ile Ile Asn Tyr Cys Asn Glu Lys Leu Gln Gln Ile Phe Ile
      405              410              415
Glu Leu Thr Leu Lys Glu Glu Gln Glu Glu Tyr Ile Arg Glu Asp Ile
      420              425              430
Glu Trp Thr His Ile Asp Tyr Phe Asn Asn Ala Ile Ile Cys Asp Leu
      435              440              445
Ile Glu Asn Asn Thr Asn Gly Ile Leu Ala Met Leu Asp Glu Glu Cys
      450              455              460
Leu Arg Pro Gly Thr Val Thr Asp Glu Thr Phe Leu Glu Lys Leu Asn
465              470              475              480
Gln Val Cys Ala Thr His Gln His Phe Glu Ser Arg Met Ser Lys Cys
      485              490              495
Ser Arg Phe Leu Asn Asp Thr Ser Leu Pro His Ser Cys Phe Arg Ile
      500              505              510

```

&lt;210&gt; 4831

&lt;211&gt; 578

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4831

```

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120
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180
cagcagagcg tgctcggcgg ccaggaccag ctgcgcgtcc gtgtgacgga gctggaggac
240
gaggtgcgca acctgcgcaa gatcaatcgg gacctgttcg acttctccac gcgcttcac
300
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420
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480
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540
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa
578

```

&lt;210&gt; 4832

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4832

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Arg Thr Val Ala Leu Lys Gly Pro Val Thr Asn Ala Ala Ile Leu Leu
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Ala Pro Val Ser Met Leu Ser Ser Asp Phe Arg Pro Ser Leu Pro Leu

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&lt;210&gt; 4830

&lt;211&gt; 512

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4830

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Met Ala Lys Met Glu Val Lys Thr Ser Leu Leu Asp Asn Met Ile Gly
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Val Gly Asp Met Val Leu Leu Glu Pro Leu Asn Glu Glu Thr Phe Ile
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Asn Asn Leu Lys Lys Arg Phe Asp His Ser Glu Ile Tyr Thr Tyr Ile
          35          40          45
Gly Ser Val Val Ile Ser Val Asn Pro Tyr Arg Ser Leu Pro Ile Tyr
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Ser Pro Glu Lys Val Glu Glu Tyr Arg Asn Arg Asn Phe Tyr Glu Leu
65          70          75          80
Ser Pro His Ile Phe Ala Leu Ser Asp Glu Ala Tyr Arg Ser Leu Arg
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Asp Gln Asp Lys Asp Gln Cys Ile Leu Ile Thr Gly Glu Ser Gly Ala
          100          105          110
Gly Lys Thr Glu Ala Ser Lys Leu Val Met Ser Tyr Val Ala Ala Val
          115          120          125
Cys Gly Lys Gly Ala Glu Val Asn Gln Val Lys Glu Gln Leu Leu Gln
          130          135          140
Ser Asn Pro Val Leu Glu Ala Phe Gly Asn Ala Lys Thr Val Arg Asn
145          150          155          160
Asp Asn Ser Ser Arg Phe Gly Lys Tyr Met Asp Ile Glu Phe Asp Phe
          165          170          175
Lys Gly Asp Pro Leu Gly Gly Val Ile Ser Asn Tyr Leu Leu Glu Lys
          180          185          190
Ser Arg Val Val Lys Gln Pro Arg Gly Glu Arg Asn Phe His Val Phe
          195          200          205
Tyr Gln Leu Leu Ser Gly Ala Ser Glu Glu Leu Leu Asn Lys Leu Lys
          210          215          220
Leu Glu Arg Asp Phe Ser Arg Tyr Asn Tyr Leu Ser Leu Asp Ser Ala
225          230          235          240
Lys Val Asn Gly Val Asp Asp Ala Ala Asn Phe Arg Thr Val Arg Asn
          245          250          255
Ala Met Gln Ile Val Gly Phe Met Asp His Glu Ala Glu Ser Val Leu
          260          265          270
Ala Val Val Ala Ala Val Leu Lys Leu Gly Asn Ile Glu Phe Lys Pro
          275          280          285
Glu Ser Arg Val Asn Gly Leu Asp Glu Ser Lys Ile Lys Asp Lys Asn
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Glu Leu Lys Glu Ile Cys Glu Leu Thr Gly Ile Asp Gln Ser Val Leu
305          310          315          320
Glu Arg Ala Phe Ser Phe Arg Thr Val Glu Ala Lys Gln Glu Lys Val
          325          330          335
Ser Thr Thr Leu Asn Val Ala Gln Ala Tyr Tyr Ala Arg Asp Ala Leu
          340          345          350
Ala Lys Asn Leu Tyr Ser Arg Leu Phe Ser Trp Leu Val Asn Arg Ile
          355          360          365
Asn Glu Ser Ile Lys Ala Gln Thr Lys Val Arg Lys Lys Val Met Gly

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1605

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 Leu Arg Ile Thr Pro Asp Met Met Ala Thr Leu Ala Lys Ser Gln Val  
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 Thr Gly Lys Gly Ile Ser Ala Thr Leu His Val Thr Ser Asn Pro Val  
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 Pro Thr Glu Ala Ser Ser Ser Ala Phe Arg Leu Met Pro Ala Leu Gly  
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 Val Ser Val Ala Asp Gln Lys Gly Lys Ser Thr Val Ala Ser Ser Glu  
                          1090                      1095                      1100  
 Ala Lys Pro Ala Ala Thr Ile Arg Ile Val Gln Gly Leu Gly Val Met  
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 Pro Pro Lys Ala Gly Gln Thr Ile Thr Val Ala Thr His Ala Lys Gln  
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 Gly Ala Ser Val Ala Ser Gly Ser Gly Thr Val His Thr Ser Ala Val  
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 Ser Leu Pro Ser Met Asn Ala Ala Val Ser Lys Thr Val Ala Val Ala  
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 Ser Gly Ala Ala Ser Thr Pro Ile Ser Ile Ser Thr Gly Ala Pro Thr  
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 Val Arg Gln Val Pro Val Ser Thr Thr Val Val Ser Thr Ser Gln Ala  
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 Gly Lys Leu Pro Thr Arg Ile Thr Val Pro Leu Ser Val Ile Ser Gln  
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 Pro Met Lys Gly Lys Ser Val Val Thr Ala Pro Ile Ile Lys Gly Asn  
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 Leu Gly Ala Asn Leu Ser Gly Leu Gly Arg Asn Ile Ile Leu Thr Thr  
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 Leu Thr Ala Gln Gln Leu Gln Gln Leu Gln Gln Gly Gln Ala Thr  
                          1265                      1270                      1275                      1280  
 Gln Val Arg Ile Gln Thr Val Pro Ala Ser Xaa Leu Gln Gln Gly Thr  
                          1285                      1290                      1295  
 Ala Ser Gly Ser Ser Lys Ala Val Ser Thr Val Val Val Thr Thr Ala  
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 Pro Ser Pro Lys Gln Ala Pro Glu Gln Gln  
                          1315                      1320

&lt;210&gt; 4829

&lt;211&gt; 1605

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4829

4010

4009

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&lt;210&gt; 4828

&lt;211&gt; 1322

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4828

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 Asp Pro Leu Glu Leu Gly Pro Cys Gly Asp Gly His Gly Thr Arg Ile  
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 Met Glu Asp Cys Leu Leu Gly Thr Arg Val Ser Leu Pro Glu Asp  
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 Leu Leu Glu Asp Pro Glu Ile Phe Phe Asp Val Val Ser Leu Ser Thr  
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 Trp Gln Glu Val Leu Ser Asp Ser Gln Arg Glu His Leu Gln Gln Phe

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<211> 105

<212> PRT

<213> Homo sapiens

<400> 4826

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Ser	Met	Lys	Arg	Gly	Leu	Asp	Val	Gln	Met	Glu	Thr	Cys	Arg	Arg	Leu
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Leu	Ser	Asp	Pro	Pro	Pro	Pro	Pro	Ser	Glu	Ala	Glu	Asp	Ser	Asp	Arg
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Asp	Val	Ser	Ser	Asp	Ser	Ser	Met	Arg							
			100					105							

<210> 4827

<211> 6277

<212> DNA

<213> Homo sapiens

<400> 4827

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 180  
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 240  
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 300  
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